usm

BULLETIN

GRADUATE PROGRAMS 1974-1975

ACCREDITED BY:

SOUTHERN ASSOCIATION OF COLLEGES AND SCHOOLS

NATIONAL ASSOCIATION OF SCHOOLS OF MUSIC

NATIONL COUNCIL FOR ACCREDITATION OF TEACHER EDUCATION

THE AMERICAN ASSOCIATION OF UNIVERSITY WOMEN

AMERICAN ASSOCIATION OF COLLEGES FOR TEACHER EDUCATION

AMERICAN CHEMICAL SOCIETY

AMERICAN SPEECH AND HEARING ASSOCIATION

MEMBER OF THE

AMERICAN COUNCIL ON EDUCATION

ASSOCIATION OF AMERICAN COLLEGES

NATIONAL COMMISSION OF ACCREDITING

COUNCIL OF GRADUATE SCHOOLS IN THE UNITED STATES

MISSISSIPPI ASSOCIATION OF COLLEGES

EQUAL EDUCATION OPPORTUNITY POLICY

The University of Southern Mississippi does not discriminate on grounds of sex, race, color, religion, or national origin.

VOLUME 62 JULY 1, 1974 NUMBER 1

UNIVERSITY OF SOUTHERN MISSISSIPPI

BULLETIN

GRADUATE PROGRAMS

1974-1975

FALL QUARTER OPENS SEPTEMBER 9, 1974

Published Quarterly by the University of Southern Mississippi, Hattiesburg, Mississippi. Entered as second-class matter February 19, 1917, at the Post Office at Hattiesburg, Mississippi, under Act of August, 24, 1912.

1974

JANUARY

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

FEBRUARY

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28		

MARCH

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

APRIL

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

MAY

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

JUNE

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

JULY

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

AUGUST

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

SEPTEMBER

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

OCTOBER

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

NOVEMBER

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

DECEMBER

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

1975

JANUARY

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

FEBRUARY

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	

MARCH

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

APRIL

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

MAY

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

JUNE

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

JULY

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

AUGUST

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

SEPTEMBER

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

OCTOBER

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

NOVEMBER

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

DECEMBER

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

1976

JANUARY

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

FEBRUARY

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29						

MARCH

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

APRIL

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

MAY

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

JUNE

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

JULY

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

AUGUST

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

SEPTEMBER

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

OCTOBER

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

NOVEMBER

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

DECEMBER

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

TABLE OF CONTENTS

CALENDAR 2, 5

PART ONE –THE GENERAL ADMINISTRATION 10

PART TWO –THE GRADUATE SCHOOL 15

PART THREE –ADMISSION REQUIREMENTS AND PROCEDURES 20

PART FOUR –GENERAL ACADEMIC REGULATIONS AND REQUIREMENTS 32

PART FIVE –COLLEGE AND SCHOOL REQUIREMENTS 41

School of Business Administration 42

Accounting 43, 44

Economics 43, 44

Finance 43

Management 43

Marketing 43

Telecommunications Management 45

College of Education and Psychology 46

Business Education 48

Counseling and Guidance 52

Curriculum and Instruction 58

Educational Administration and Supervision 67

Industrial and Vocational Education 71

Library Science 72

Psychology 73

Research and Human Development 75

Science Education 81

Special Education 83

School of Fine Arts 85

Art Education 86

Music 87

Music Education 89

Theatre Arts 89

School of Health, Physical Education, and Recreation 92

Health 92

Physical Education 93

Recreation 94

School of Home Economics 95
Environmental Design 95
Family Life Services 95
Food and Nutrition 96
Home Economics Education 96
College of Liberal Arts 97
Criminal Justice Program 97
Latin American Studies 97
Anthropology, Philosophy, and Religion 98
Communication 99
English 100
Foreign Languages 100
Geography 102
History 103
Political Science 107
Sociology 108
Speech and Hearing Sciences 109
College of Science and Technology 111
Environmental Science 111
Food Science and Technology 111
Biology 112
Chemistry 113
Computer Science and Statistics 114
Geology 114
Mathematics 115
Medical Technology 116
Microbiology 117
Institute of Genetics 118
Physics 119
Polymer Science 119
Science Education 119
School of Social Work 122
PART SIX —COURSE DESCRIPTIONS
(Alphabetical Listing) 127
PART SEVEN —FACULTY 212

CALENDAR

GENERAL CALENDAR 1974 - 1975

FALL QUARTER – 1974

Friday, August 23, 1974
Deadline for making application for admission
Wednesday, September 4
Faculty available for advisement
Thursday and Friday, September 5 and 6
Pre-quarter faculty meetings
Sunday, September 8
Dormitories open
Monday and Tuesday, September 9 and 10
Orientation for freshman and transfer students
Monday, September 9
Registration by appointment
Tuesday, September 10
Continuation of registration by appointment
Last day to register without late registration fee
6:30- 8:00 p.m. Tuesday night classes meet (this week only)
8:30-10:00 p.m. Thursday night classes meet (this week only)
Wednesday, September 11
8:00 a.m. Day classes meet on schedule
1:00 p.m. Change of schedule and late registration begin
6:30- 8:00 p.m. Monday night classes meet (this week only)
8:30-10:00 p.m. Wednesday night classes meet (this week only)
Thursday, September 12
Thursday night classes will meet
Saturday, September 14
Tuesday class periods A-E meet
Wednesday, September 18
Last day for registering or adding full term Fall Quarter courses
Tuesday, October 8
Last day for dropping courses without academic penalty
Monday, October 21
Beginning of second term of Fall Quarter–only date for adding or registering for second term courses
Deadline for submitting applications to School of Nursing
Last day to file application for Winter degree completion
Saturday, November 2
Admission Test for Graduate Study in Business (ATGSB)
Friday, November 15
Last day of regularly scheduled classes
Monday, Tuesday, Wednesday, November 18, 19, 20
Fall Quarter Examinations (night classes will meet through Wednesday, November 20, 1974)

WINTER QUARTER – 1974 - 1975

FIRST TERM

Tuesday, November 12, 1974
Deadline for making application for admission
Monday, December 2
Registration by appointment
Tuesday, December 3
Continuation of registration by appointment
Last day of registration without late fee
6:30- 8:00 p.m. Tuesday night classes meet (this week only)
8:30-10:00 p.m. Thursday night classes meet (this week only)
Wednesday, December 4
8:00 a.m. Day classes meet on schedule
1:00 p.m. Change of schedule and late registration begin
6:30- 8:00 p.m. Monday night classes meet (this week only)
8:30-10:00 p.m. Wednesday night classes meet (this week only)
Thursday, December 5
Thursday night classes will meet
Wednesday, December 11
Last day for registering or adding full term Winter Quarter courses
Friday, December 20
5:00 p.m. Christmas holidays begin
Monday, January 6, 1975
8:00 a.m. Class work resumes (night classes meet)
Tuesday, January 14
Last day for dropping courses without academic penalty

SECOND TERM

Wednesday, January 22
Beginning of second term of Winter Quarter–only date for adding or registering for second term courses
Deadline for submitting applications to School of Nursing
Last day to file application for May graduation
Saturday, January 25
Admission Test for Graduate Study in Business (ATGSB)
Friday, February 21
Last day of regularly scheduled classes
Monday, Tuesday, Wednesday, February 24, 25, 26
Winter Quarter Examinations (night classes will meet through Wednesday, February 26, 1975

SPRING QUARTER – 1975

Tuesday, February 18, 1975
Deadline for making application for admission

Monday, March 10
Registration by appointment

Tuesday, March 11
Continuation of registration by appointment
Last day to register without late fee
6:30- 8:00 p.m. Tuesday night classes meet (this week only)
8:30-10:00 p.m. Thursday night classes meet (this week only)

Wednesday, March 12
8:00 a.m. Day classes meet on schedule
1:00 p.m Change of schedule and late registration begin
6:30- 8:00 p.m. Monday night classes meet (this week only)
8:30-10:00 p.m. Wednesday night classes meet (this week only) Wednesday night classes will meet on one Friday night during the quarter at the convenience of the instructor and class.

Thursday, March 13
Thursday night classes meet.

Saturday, March 15
Monday class periods 1-7 meet.

Wednesday, March 19
Last day for registering or adding full term Spring Quarter courses

Saturday, March 22
Admission Test for Graduate Study in Business (ATGSB)

Thursday, March 27
10:00 p.m. Easter holidays begin (night classes will meet)

Sunday, March 30
University of Southern Mississippi Day

Monday, March 31
Monday night classes resume

Tuesday, April 1
8:00 a.m. Regular class work resumes

Thursday, April 10
Last day for dropping courses without academic penalty

Monday, April 21
Beginning of second term of Spring Quarter--only date for adding or registering for second term courses
Deadline for submitting applications to School of Nursing
Last day to file application for August graduation

Friday, May 16
Last day of regularly scheduled classes

Monday, Tuesday, Wednesday, May 19, 20, 21
Spring Quarter Examinations (Monday and Tuesday night classes will meet)

Wednesday, May 21
7:30 p.m. Graduation Exercises

SUMMER QUARTER – 1975

Tuesday, May 13, 1975
- Deadline for making application for admission

Monday, June 2
- Orientation for freshman and transfer students
- Registration by appointment

Tuesday, June 3
- Continuation of registration by appointment
- Only day to register for full quarter or first term courses without late fee

Wednesday, June 4
- 8:00 a.m. Day classes meet on schedule
- 1:00 p.m. Change of schedule and late registration begin
- 6:30- 8:00 p.m. Monday night classes meet (this week only)
- 8:30-10:00 p.m. Wednesday night classes meet (this week only)

Thursday, June 5
- 6:30- 8:00 p.m. Tuesday night classes meet (this week only)
- 8:30-10:00 p.m. Thursday night classes meet (this week only)

Friday, June 6
- Last day for registering or adding first term courses

Saturday, June 7
- Tuesday class periods A-E meet

Wednesday, June 11
- Last day for registering or adding full quarter courses
- Last day for dropping first term courses

Friday, June 20
- Last day for dropping full quarter courses without academic penalty
- Deadline for making application for admission for the second term of the Summer Quarter

Monday, July 7
- Registration for second term of Summer Quarter
- Second term courses may be added without change of schedule fee
- Deadline for submitting applications to School of Nursing
- Last day to file application for Fall degree completion

Wednesday, July 9
- Last day for registering or adding second term courses

Saturday, July 12
- Admission Test for Graduate Study in Business (ATGSB)

Monday, July 14
- Last day for dropping second term courses

Friday, August 8
- Last day of regularly scheduled classes

Monday, Tuesday, Wednesday, August 11, 12, 13
- Summer Quarter Examinations (night classes will not meet)

Wednesday, August 13
- 7:30 p.m. Graduation Exercises

PART ONE

GENERAL ADMINISTRATION

BOARD OF TRUSTEES

ADMINISTRATIVE OFFICERS

THE GRADUATE COUNCIL

BOARD OF TRUSTEES
Of State Institutions of Higher Learning, State Of Mississippi

---

Members Whose Terms Expire May 7, 1984
BOBBY L. CHAIN, Sixth Congressional District, Hattiesburg
DR. ROBERT W. HARRISON, Central Supreme Court District, Yazoo City
TRAVIS E. PARKER, State-at-Large, Drew
MRS. MIRIAM QUINN SIMMONS, Southern Supreme Court District, Columbia

---

Members Whose Terms Expire May 7, 1980
DR. VERNER S. HOLMES, Seventh Congressional District, McComb
BOSWELL STEVENS, First Congressional District, Macon
DR. R.C. COOK, State-at-Large, Hattiesburg
W.M. SHOEMAKER, Fifth Congressional District, Meridian

Members Whose Terms Expire May 7, 1976
MILTON E. BRISTER, Fourth Congressional District Kilmichael
M. PAUL HAYNES, Northern Supreme Court District, Baldwyn
THOMAS N. TURNER, Third Congressional District, Belzoni
MIKE P. STURDIVANT, Second Congressional District, Glendora
ROSS L. FRANKS, La Bauve Trustee, Hernando

OFFICERS OF THE BOARD
MILTON E. BRISTER, Chairman
DR. E.E. THRASH, Executive Secretary and Director

ADMINISTRATIVE OFFICERS

WILLIAM DAVID McCAIN, B.S., M.A., Ph.D., Litt.D . . . . . President

ACADEMIC

CHARLES WICKLIFFE MOORMAN, A.B., M.A., Ph.D . . . . . Dean of the University

JACK ALAN SMITH, B.S., M.A., Ph.D . . . . . Administrative Assistant to the Dean

ROBERT THOMAS van ALLER, B.S., M.S., Ph.D. . . . . Dean of the Graduate School

ERIC McCOY GUNN, B.S., M.A., Ed.D. . . . . Dean of the College of Education and Psychology

CLAUDE EDWIN FIKE, A.B., A.M., Ph.D. . . . . Dean of the College of Liberal Arts

SHELBY FRELAND THAMES, B.S., M.S., Ph.D. . . . . Dean of the College of Science and Technology

JOSEPH ARTHUR GREENE, JR., A.B., M.A., Ph.D. . . . . Dean of the School of Business Administration

RAYMOND MANNONI, B.S., M.M., M.M.Ed., Mus. Ed.D. . . . . Dean of the School of Fine Arts

SARAH WEAVER GIBBS, B.S., M.A., Ph.D. . . . . Dean of the School of Home Economics

M. ELIZABETH CATHERINE HARKINS, B.S., M.S. . . . . Dean of the School of Nursing

WILLIAM THEODORE SCHMIDT, B.A., M.A., Ph.D. . . . . Dean of the School of Health, Physical Education, and Recreation

LESTER JAY GLICK, B.A., M.S.W., D.S.W. . . . . Dean of School of Social Work

FINANCIAL SECRETARY

CHARLES OTTO SMALLING, B.S. . . . . Administrative Assistant to the President for Finances

ALBERT JOSEPH JAEGER, B.B.A., M.S. . . . . Acting Financial Secretary

JOEL REESE EAKENS, B.S. . . . . Director of Physical Plant

HOMER ELTON SULLIVAN, JR., B.S. in B.A. . . . . Director of Housing

BETTY GILLIS COOLEY, B.S. . . . . Cashier, Business Office

KENNETH ELMO SMITH, B.B.A., M.S., C.P.A. . . . . Chief Accountant

JESSE AUSTIN GORE . . . . . Manager of University Bookstore

BAKER MOONEY FERRELL . . . . . Director of University Commons

JACK HORACE TUGGLE, B.S. in B.A. . . . . Director of Personnel Services

CECIL MARSHALL KLUTSS, B.S. . . . . Purchasing Agent

ROBERT WILSON GALBRAITH, B.S., M.B.A. . . . . Director of Research and Projects

EXECUTIVE AFFAIRS AND DEVELOPMENT

ROGER BARTON JOHNSON, B.S., M.S. . . . . Executive Administrative Assistant to the President

BERNARD REED GREEN, B.S. . . . Administrative Assistant to the President for Athletics and Public Relations

WALTER OLIVER CONN, B.S., M.S. . . . . Director of Student Aid and Scholarships
CARL CONN LAWRENCE, B.S. . . . . Director of Placement Bureau
POWELL G. OGLETREE, B.S., M.A. . . . . Alumni Secretary
WILLIAM CLARENCE SCRUGGS, JR., B.S. . . . . Director of Computer Center
WARREN FRANCIS TRACY, A.B., B.S., M.A., Ph.D. . . . . Librarian
BILLY LEON GREEN, B.S., M.B.A. . . . . Director of Data Processing
WILLIAM ELLIS KIRKPATRICK, B.S., M.S. . . . . Director of Public Relations

STUDENT AFFAIRS

PETER EASTON DURKEE, A.B., M.A., Ph.D. . . . . Dean of Students
WILLIAM RADER GRANTHAM, B.S., M.A. . . . . Associate Dean of Students
BILLY WAYNE SHAFER, B.S., M.Ed., Ph.D. . . . . Director of Student Counseling
WARREN DUNN, B.S., M.S. . . . . Director of Student Union and Student Activities
WILLIE VERNON OUBRE, B.S. . . . . Director of Campus Security
THOMAS STANLEY MARTIN, B.S., M.Ed., M.D. . . . . Director of Student Health Services
GRAHAM LEE HALES, JR., B.A., B.D., Th.D. . . . . Chaplain and Coordinator of Religious Activities

INTERCOLLEGIATE ATHLETICS

ROLAND HALL DALE, B.S. . . . . Director of Intercollegiate Athletics
CELESTAIN JOSEPH PETER TAYLOR, B.S., M.S. . . . . Assistant Athletic Director and Head Baseball Coach
P. W. UNDERWOOD, B.S. . . . . Head Football Coach
EUGENE WARREN CLARK, B.S. . . . . Basketball Coach
ROBERT HAYS CLEVELAND, B.S. . . . . Sport Information Director

OTHER ADMINISTRATIVE AREAS

Extension and Public Service

GOMER JEFFREY POUND, Mus.B., M.Mus.Ed., Ph.D. in M.Ed. . . . . Dean of the Division of Extension and Public Service
JOE EARL HOLLOWAY, B.S., M.Ed. Ed.D. . . . . Dean, USM-Gulf Park
BILL WES GORE, B.S., M.S., Ph.D. . . . . Dean, USM-Natchez

Research and Records

SIDNEY E.L. WEATHERFORD, JR., B.S., M.A., Ed.D. . . . . Director of Institutional Research
GENE DUANE SAUCIER, B.S., M.S. . . . . Dean of Admissions and Special Academic Services
DANNY WAYNE MONTGOMERY, B.S. . . . . Registrar

English Language Institute

RICHARD TAYLOR DODDER, B.S. in B.A. . . . . Director of the English Language Institute

GRADUATE COUNCIL

Officers of the Council

ROBERT THOMAS van ALLER, Ph.D. . . . . Chairman

JAMES GILBERT LANGDON, Ed.D. . . . . Secretary

WILLIAM DAVID McCAIN, Ph.D., LittD. . . . . Ex-Officio Member

WARREN FRANCIS TRACY, Ph.D. . . . . Ex-Officio Member

MEMBERS

SCHOOL OF BUSINESS ADMINISTRATION
Henry Arthur Gottleber, Ph.D.

COLLEGE OF EDUCATION AND PSYCHOLOGY
Herschel Quinton Peddicord, Ed.D.
James Douglas Lowe, Ph.D.

SCHOOL OF FINE ARTS
Jack Pollard Donovan, Ph.D.

SCHOOL OF HEALTH, PHYSICAL EDUCATION, AND RECREATION
S. Eugene Barnes, Ph.D.

SCHOOL OF HOME ECONOMICS
Altra Howse Gill Hamman, Ph.D.

COLLEGE OF LIBERAL ARTS
Jay Paschal Anglin, Ph.D.

COLLEGE OF SCIENCE AND TECHNOLOGY
Robert William King, Ph.D.

SCHOOL OF SOCIAL WORK
Robert Walter Clinch, Ph.D.

PART TWO

THE GRADUATE SCHOOL

THE GRADUATE SCHOOL

The Graduate School at the University of Southern Mississippi was established in 1947 to recognize the University's growing responsibilities as a center of higher learning, and to provide an academic environment in which advanced research and free inquiry could develop to the advantage of both the student and the State. In the years since 1947, the University's graduate programs have developed logically on the growing points of strong undergraduate schools and departments to meet the needs for professional competence beyond the academic measure of the baccalaureate degree.

In response to the need to offer graduate programs beyond the boundaries of the Hattiesburg campus, the Board of Trustees in 1972 authorized the University to grant graduate degrees on the campuses at the University of Southern Mississippi–Gulf Park and the University of Southern Mississippi–Natchez. Course work taken at the Hattiesburg, Gulf Park, and Natchez campuses is considered as campus work.

The Graduate School's Place Within the University Structure

The Graduate School is administered by a dean executing policies determined by the Graduate Council of which the Dean of the Graduate School serves as chairman.

The present composition of the Graduate Council (see Part I) includes the Dean of the Graduate School as chairman with two representatives from the College of Education and Psychology and one representative each from the College of Liberal Arts, the College of Science, the School of Business Administration, the School of Fine Arts, the School of Health, Physical Education, and Recreation, the School of Home Economics and the School of Social Work. Council members are appointed by the President of the University upon the recommendation of the Dean of the University. Permanent ex officio members are the President of the University and the University Librarian. The University Registrar serves as secretary to the Council.

The responsibilities of the Graduate Council, representing both administration and faculty, include:

1. Determining policies of admission to the Graduate School.
2. Considering and approving graduate programs submitted to the Council through curriculum committees of each college and school.
3. Electing members of the Graduate Faculty upon recommendation by the academic deans.
4. Approving new courses (and deleting courses) for graduate credit.
5. Acting upon any other problems affecting graduate programs.

The graduate programs approved by the Council are carried out through the Graduate Faculty (see Part VII of this **Bulletin**) in each degree- granting college or school of the University's academic organization.

DEGREE PROGRAMS OFFERED

The University of Southern Mississippi offers graduate level programs in nearly every recognized academic discipline. In addition, master's degrees are now offered at USM–Gulf Park in general elementary education, selected minor areas of secondary education, and a Master of Business Administration degree with a field of emphasis in management. Master's degrees are now offered at USM–Natchez in general elementary education and selected minor areas of secondary education and a Master of Business Administration. Even those departments not yet ready to offer master's or doctoral degrees are usually equipped to offer a graduate minor.

The degrees which are offered and their fields are listed below.

DOCTOR OF PHILOSOPHY

Audiology
Biology
Chemistry
Communication
Comparative Literature
Counseling and Guidance
Early Childhood Education
Educational Administration
Elementary Education
English
Geography
Guidance
Health, Physical Education, and Recreation
Higher Education
History
Microbiology
Music Education
Political Science
Polymer Science
Psychology (Clinical)
Psychology (Developmental)
Psychology (Experimental)
Psychology (General)
Reading
School Psychology
Science Education
Secondary Education
Special Education
Speech and Hearing Sciences
Speech Pathology

DOCTOR OF EDUCATION

Adult Education
Counseling and Guidance
Early Childhood Education
Educational Administration
Elementary Education
Guidance
Health, Physical Education, and Recreation
Higher Education
Mathematics
Reading
Secondary Education
Science Education
Special Education

DOCTOR OF MUSIC EDUCATION

Music Education

MASTER OF PHILOSOPHY

Audiology
Biology
History
Microbiology

Chemistry
Communication
Comparative Literature
English
Geography
Political Science
Polymer Science
Science Education
Speech and Hearing Sciences
Speech Pathology

SPECIALIST'S DEGREE

Adult Education
Business Education
Counseling and Guidance
Curriculum and Supervision
Early Childhood Education
Educational Administration
Educational Research
Elementary Education
Media and Instructional Technology
Music
Music Education
Reading
School Counseling
Science Education
Secondary Education
Special Education

MASTER OF ART EDUCATION

Art Education

MASTER OF ARTS

American Literature
Anthropology
Audiology
Biology
Chemistry
Communication
Comparative Literature
Economics
English
English Literature
French
Geography
Geology
German
History
Language Disorders
Latin American Studies
Library Science
Linguistics
Mathematics
Philosophy
Physics
Political Science
Professional Psychology
Public Address
Science Education
Social Studies
Sociology
Spanish
Speech and Hearing Sciences
Speech Pathology
Theatre Arts

MASTER OF BUSINESS ADMINISTRATION

Accounting
Economics
Finance
Management
Marketing

MASTER OF EDUCATION

Adult Education
Biology
Business Education
Learning Disabilities
Mathematics
Mental Retardation

Early Childhood Education
Educational Administration
Educational Media and Technology
Elementary Education
Emotionally Disturbed
Geology
Gifted and Creative
Physically Handicapped
School Counseling
Science Education
Secondary Education
Speech and Hearing Sciences
Supervision of Instruction
Visually Handicapped

MASTER OF FINE ARTS

Theatre Arts

MASTER OF MUSIC

Church Music
Conducting
Jazz
Music History and Literature
Organ
Piano
String
Theory-Composition
Voice
Wind

MASTER OF MUSIC EDUCATION

Music Education

MASTER OF SCIENCE

Accounting
American Literature
Anthropology
Audiology
Biology
Business Education
Chemistry
Child Development
Clothing and Textiles
Clothing Merchandising
College Counseling
Communication
Community Counseling
Economics
English
English Literature
Food and Nutrition
Food Science and Technology
French
Geography
Geology
Health Education
History
Home Economics
Industrial Arts
Institution Management
Language Disorders
Library Science
Linguistics
Marriage and Family Life
Mathematics
Medical Technology
Microbiology
Physical Education
Physics
Political Science
Polymer Science
Professional Psychology
Public Address
Reading
Recreation
Science Education
Secondary Education
Social Studies
Spanish
Speech and Hearing Sciences
Speech Pathology
Telecommunications Managment
Vocational Technical Education

PART THREE

ADMISSION REQUIREMENTS AND PROCEDURES

FINANCIAL INFORMATION

ADMISSION REQUIREMENTS AND PROCEDURES

Since applicants must always be admitted to a specific program within the Graduate School, all applications for admission to the Graduate School are closely reviewed and must be approved by the chairman of the department in which the student intends to study, by the school or college dean, and by the Graduate Dean. Admission forms are procurable from and should be submitted to the University Admissions Office.

The aptitude phase (verbal and quantitative sections) of the Graduate Record Examinations is required of all applicants to the Graduate School except in the School of Business Administration which requires the Admission Test for Graduate Study in Business. Prospective students should plan to take the appropriate examination, given several times a year at a number of university testing centers, early in their senior year and request that a copy of their scores be sent to the Graduate Office.

The academic record, character, and conditions of application of the applicant must be in accordance with the rules and regulations of the Board of Trustees of State Institutions of Higher Learning and with the laws of the State of Mississippi. The applicant must have excellent moral character in conformity with the generally accepted standards customarily in effect in the University.

The University reserves the right to cancel the admission or registration of an individual whose attendance at the University, in the opinion of the appropriate administrative officer and the President, would not be mutually beneficial to himself and to the institution.

It should be clearly understood that the admission requirements listed below represent the minimal standards set by the Graduate Council and that additional requirements and higher standards may well be stipulated by the various department chairmen.

TYPES OF ADMISSION TO MASTER'S PROGRAMS

I. Regular Admission:

A. The applicant must hold a baccalaureate degree from an institution approved by a recognized accrediting agency.

B. The applicant must be eligible to re-enter in good standing the last college or university he attended.

C. The applicant must present evidence, by official transcript (two copies), of a grade point average of at least 2.75 (figured on an A equals 4.0 scale) for the last two years of undergraduate study, and a grade point average of at least 3.0 on undergraduate courses in the field of proposed graduate study. Any exception to this requirement must be cleared with the appropriate department chairman, the dean concerned, and the Graduate Dean.

D. The applicant must present an acceptable test score on the aptitude sections of the Graduate Record Examinations or the Admission Test for Graduate Study in Business applicable to the program into

which he seeks admission. Test score requirements vary between departments and some require the advanced section of the Graduate Record Examinations. Consult specific departmental requirements for this information.

E. The appropriate department chairman, the school or college dean, and the Graduate Dean must be satisfied that the applicant shows promise of satisfying graduate degree requirements.

II. Conditional Admission:

A student who does not meet the minimum admission standards for either grade-point average or Graduate Record Examinations or the Admission Test for Graduate Study in Business may be admitted on a conditional basis in one of two ways:

A. He must present a score on the aptitude sections of the Graduate Record Examinations or Admission Test for Graduate Study in Business equal to or above that specified for the graduate program into which admission is requested, and a grade point average no lower than 2.5.

B. He must present a grade point average of 2.75 or above if his score is lower than that specified for the program into which admission is desired.

Conditional admission can be given only upon the specific recommendation of the department chairman, the school or college dean, and the Graduate Dean.

A conditional graduate student must meet the following conditions if he is to continue in the Graduate School:

A. If his first enrollment is as a full-time student, he must make grades of B or better on each graduate course attempted during the first quarter.

B. If his first enrollment is as a part-time student, he must makes grades of B or better on his first nine (9) semester hours, or grades of B or better on all courses taken while completing the nine-hour requirement.

All courses taken to remove conditional admission must be taken on a campus of the University of Southern Mississippi. Upon the recommendation of the department chairman and the Graduate Dean, the conditional admission may be removed and the student reclassified as a regular student.

III. Non- Degree Graduate Student

Admission as a non-degree graduate student may be granted for any of the following reasons:

A. He did not meet requirements for conditional or regular admission before the deadline.

B. He may or may not be able to meet admission requirements but does not desire to work toward a graduate degree.

C. He is enrolled in another university and desires to obtain credit from the University of Southern Mississippi to be transferred to the graduate school in which he or she is seeking a degree.

REGULATIONS GOVERNING NON-DEGREE GRADUATE STUDENTS

Even though a non-degree graduate student has been admitted to the University, he **has not** been admitted to any department or to any degree program.

To be allowed to continue as a non-degree graduate student, the student **must** consult with the department chairman or academic **adviser** of the department in which he is taking courses during the first quarter enrolled at the University **regardless** of whether or not the student plans to seek a degree.

To become a degree-seeking student, the student **must**:

1. Complete the Graduate Record Examinations or the Admission Test for Graduate Study in Business during the first quarter enrolled at the University. In addition, a total of no more than nine (9) semester hours earned while classified as a non-degree graduate student may be applied toward a graduate degree at the University of Southern Mississippi.
2. Have the minimum grade point average and Graduate Record Examinations score or the Admission Test for Graduate Study in Business score requirements for regular or conditional admission in the department where he plans to seek the degree.
3. Complete an application for conditional or regular admission in the Admissions Office after completing the Graduate Record Examination or the Admission Test for Graduate Study in Business and when other admission requirements are complete.

No more than nine (9) semester hours earned while classified as a non-degree graduate student will be accepted toward a graduate degree at the University of Southern Mississippi. A student must, therefore, gain conditional or regular admission before completing more than nine (9) semester hours of study for these additional hours to be counted toward a degree.

A non-degree graduate student must hold a baccalaureate degree from an accredited institution.

Non-degree students desiring to enroll on a campus of the University of Southern Mississippi will be expected to file an application for admission by the appropriate deadline.

Students may be admitted as non-degree students to the School of Business Administration only if they have undergraduate grade point averages of 2.75 or above.

A graduate student of any classification may count a total of **no more than nine (9) semester hours of extension work, transfer work, resident center work, and non-degree work toward a master's degree.**

TYPES OF ADMISSION TO ADVANCED GRADUATE STUDY

Three advanced level programs are available for students who hold a master's degree and who wish to do additional graduate work. The first of these programs leads to the specialist's degree, the second to the Master of Philosophy degree, and the third to the various doctoral degrees.

I. Regular Admission:

For regular admission to advanced graduate study, a student must present a grade point average no lower than 3.25 for the specialist's and the Master of Philosophy programs or 3.50 for the doctoral program on previous graduate work and an acceptable test score on the aptitude phase of the Graduate Record Examinations for the degree program for which he seeks admission.

II. Conditional Admission:

For conditional admission to advanced graduate study a student must present either (a) a grade point average of between 3.00 and 3.25 for the specialist's and the Master of Philosophy programs or 3.25 and 3.50 for the doctoral program on previous graduate work and an acceptable Graduate Record Examinations score or (b) a grade point average no lower than 3.25 for the specialist's and the Master of Philosophy programs or 3.50 for the doctoral program if the Graduate Record Examinations score does not meet the acceptable score for regular admission.

Conditional status at the advanced graduate level may be removed on the recommendation of the department chairman provided the student has attained a grade point average of at least 3.25 on the first nine (9) semester hours of course work numbered 600 or above or on all courses taken while completing this requirement.

To be admitted to advanced graduate study, the student must submit a formal application through the Admissions Office even though he may have successfully completed a master's degree program at the University of Southern Mississippi. Acceptance as an advanced graduate student is contingent upon the approval of the department chairman, the school or college dean, and the Graduate Dean.

III. Non-Degree Student:

An applicant for advanced study may be admitted as a non-degree student under the same conditions outlined for a master's degree applicant.

Limitations on University Faculty Members

Members of the faculty of the University of Southern Mississippi above the rank of instructor cannot become candidates for a doctoral degree at this institution. They may, however, enroll for graduate courses. Faculty members of the rank of instructor may become candidates for doctoral degrees at the

University of Southern Mississippi on the same terms as any other advanced graduate student candidate.

PROCEDURES FOR APPLYING FOR ADMISSION

I. Application materials are available from the Dean of Admissions, Southern Station, Box 11, Hattiesburg, Mississippi 39401.

II. All credentials (application, recommendations, two official transcripts from each institution attended) must be submitted to the Dean of Admissions and Special Services by the deadline published in the University Calendar.

III. **After all credentials are received, the Admissions Office will compute the applicant's grade point average and will forward the application and transcripts to the appropriate department chairman, school or college dean, and the Graduate Dean.** As soon as the application has been processed by the department chairman, the school or college dean concerned, and the Graduate Dean, the Dean of Admissions will notify the applicant of the University's decision on his request for admission.

Permission for Undergraduate Seniors to Register for Graduate Credit

Exceptionally well qualified undergraduate students at the University of Southern Mississippi may apply to the Graduate Office for permission to take course work for graduate credit if they are within six (6) semester hours of meeting bachelor's degree requirements as certified by the Registrar. If the Graduate Dean approves, the student may then register for graduate courses up to a maximum of six (6) semester hours of graduate credit with a total course load not exceeding twelve (12) semester hours. The student must complete requirements for the baccalaureate degree within the first quarter in which he registers for graduate courses. The student's application for admission to the Graduate School will not be given final approval until after he satisfies all requirements for the baccalaureate degree.

STUDENT EXPENSES

The University of Southern Mississippi is supported chiefly by legislative appropriations. Increases in student fees are put into effect only when public support funds are inadequate and no other resources are available; therefore **the University must reserve the right to increase or modify fees and expenses without prior notice but with approval of the Board of Trustees of State Institutions of Higher Learning.**

Fees and expenses are in the form of incidental fees, room and board, and special fees.

INCIDENTAL FEE. This fee, together with the allocation from the legislative appropriation, is used for general support of the University.

Athletic activities, health service, and UAC programs are not included for part-time students.

Full-time students for purposes of assessing fees are as follows: Graduate School, seven (7) or more semester hours; all other schools and colleges, nine (9) or more semester hours. Graduate students enrolled for more than thirteen (13) semester hours and undergraduate students enrolled for more than fourteen (14) semester hours will be assessed the applicable fee for each additional semester hours. (Students training under Veterans Administration programs are required to carry a minimum number of semester hours for the entire quarter to receive full subsistence. The requirements are seven [7] semester hours on the graduate level and nine [9] semester hours on the undergraduate level.)

Clinical and hospital services covered by the health service charge included in the incidental fee are limited to cases of ordinary illness. Services are provided within the limits of the professional, technical, and physical resources of the Clinic. The University does not assume responsibility in cases of extended illness or for the treatment of chronic diseases. Cases requiring surgery must be handled by a physician and hospital of the student's choice.

ROOM AND BOARD. The room and board fees are assessed for all students living in University-controlled residence halls and those students living in fraternity houses. All students rooming in residence halls or fraternity houses are required to take their meals in the University Commons. Students living in Elam Arms and Hillcrest will eat in the cafeterias in those residence halls.

A room deposit of $15.00 is payable in advance for the reservation of space in the residence halls. This amount is held as a breakage deposit until a student withdraws from the residence hall.

A student accepting residence hall space **will be financially obligated to pay a full quarter's room rent.** A refund of the residence hall fee will be made only upon withdrawal from the University.

OTHER FINANCIAL INFORMATION. Fees of all students are due and payable at time of registration; however, fees of students enrolled for six semester hours or more may be paid one-half upon entrance and the balance one week prior to the beginning of the second half of the quarter. This procedure applies to all campuses and resident centers only.

The University reserve the right to withhold readmission to a student until all delinquent accounts have been paid. Transcripts of credits will not be issued for students whose accounts are delinquent.

Fines accumulated as a result of failure to adhere to the established procedures of the University, such as Library and Security regulations, or any other policy establishing regulations for the protection of University property shall become collectible by the Business Office, and if not collected shall constitute a delinquent account.

Students whose check for registration are returned will be assessed the late registration fee of $10.00.

A fee of $2.00 for operation of the University Union is included in the fees of all full-time students. A $1.00 fee is added to the incidental fee assessment of part-time students.

Courses requiring special fees and music fees are shown in the Special Fee listing (Table II).

A fee of $6.50 for **The Southerner** (University annual) is payable each

school year by all full-time undergraduate students.

NON-RESIDENT STATUS. The Legislature of the State of Mississippi has passed the following legislation concerning non-resident status:

The board of trustees of each junior college in this state, the board of trustees of state institutions of higher learning, and the administrative authorities of each institution governed by said boards, in ascertaining and determining the legal residence of and tuition to be charged any student applying for admission to such institutions, shall be governed by the following definitions and conditions:

Legal residence of a minor. The residence of a person less than twenty-one (21) years of age is that of the father. After the death of the father, the residence of the minor is that of the mother. If the parents are divorced, the residence of the minor is that of the parent who was granted custody by the court; or, if custody was not granted, the residence continues to be that of the father. If both parents are dead, the residence of the minor is that of the last surviving parent at the time of the parent's death, unless the minor lives with a legal guardian of his person, duly appointed by a proper court of Mississippi, in which case his residence becomes that of the guardian.

Legal residence of an adult. The residence of an adult is that place where he is domiciled, that is, the place where he actually physically resides with the intention of remaining there indefinitely or of returning there permanently when temporarily absent.

Removal of parents from Mississippi. If the parents of a minor who is enrolled as a student in an institution of higher learning move their legal residence from the State of Mississippi, the minor is immediately classified as a non-resident student.

Twelve months of residence required. No student may be admitted to any institution of higher learning as a resident of Mississippi unless his residence, as defined hereinabove, has been in the State of Mississippi for a continuous period of at least twelve (12) months immediately preceding his admission.

Residence in an education institution not counted. A person who has entered the State of Mississippi from another state and enters an educational institution within twelve (12) months is considered a non-resident. For this reason, any period of time when such a person is enrolled in any educational institution in Mississippi may not be counted as any part of the twelve (12) months prerequisite to his admission to an institution of higher learning as a resident student. Even though he may have been legally adopted by a resident of Mississippi, or may have been a qualified voter, or a landowner, or may otherwise have sought to establish legal residence, such a person will still be considered as being a non-resident of Mississippi if he has entered this state for the purpose of enrolling in an educational institution.

Residence status of a married woman. A married woman may claim the residence status of her husband, or she may claim independent residence status under the same regulations, set forth above, as any other adult.

Children of parents who are employed by institutions of higher learning. Children of parents who are members of the faculty or staff of any institution under the jurisdiciton of the board of trustees may be classified as residents

during the time that their parents are such faculty or staff members without regard to the residence requirement of twelve (12) months, for the purpose of attendance at the institution where their parents are faculty or staff members.

Military personnel assigned an active duty station in Mississippi. Members of the armed forces on extended active duty and stationed within the State of Mississippi, except those military personnel whose active duty assignment in the State of Mississippi is for educational purposes, may be classified as residents, without regard to the residence requirement of twelve (12) months, for the purpose of attendance of State-supported institutions of higher learning and junior colleges of the State of Mississippi. Resident status of such military personnel who are not legal residents of Mississippi, as defined under "Legal residence of an adult" in paragraph 2 above, shall terminate upon their reassignment for duty in the continental United States outside the State of Mississippi.

Children of military personnel. Resident status of children of members of the Armed Forces on extended active duty shall be that of the military parent for the purpose of attending State-supported institutions of higher learning and junior colleges of the State of Mississippi during the time that their military parents are stationed within the State of Mississippi and shall be continued through the time that military parents are stationed in an overseas area with last duty assignment with the State of Mississippi, excepting temporary training assignments en route from Mississippi. Resident status of minor children shall terminate upon reassignment under Permanent Change of Station Orders of their military parents for duty in the continental United States outside the State of Mississippi, excepting temporary training assignments en route from Mississippi.

Certification of residence of military personnel. A military person on active duty stationed in Mississippi who wishes to avail himself or his dependents of the provision of paragraph 8, must submit a certificate from his military organization showing the name of the military member; the name of the department, if for a dependent; the name of the organization of assignment and its address (may be in the letterhead); that the military member will be on active duty station in Mississippi on the date of registration at the State- supported institution of higher learning or junior college of the State of Mississippi; that the military member is not on transfer orders; and the signature of the Commanding Officer, the Adjutant, or the Personnel Officer of the unit of assignment with signer's rank and title. A military certificate must be presented to the registrar of the State-supported institution of higher learning or junior college of the State of Mississippi each semester or tri-semester at (or within ten [10] days prior to) registration each semester for the provision of paragraph 8 hereof to be effective.

Aliens. All aliens are classified as non-residents.

Students holding fellowships. Non-resident students holding University financed fellowships will not be required to pay the non-resident fee during the time they hold such appointments.

REFUND POLICY. A student who officially withdraws after enrollement may obtain a refund in accordance with the following:

a. A refund of 80% of incidental and special fees paid will be made to

a student who withdraws within the week following the week of registration.

b. A student who withdraws for any reason prior to midterm of any quarter but after the week following the week of registration will be refunded 50% of the incidental and special fees.

c. A student who withdraws after midterm of any quarter will not be entitled to a refund of fees.

d. No adjustment of incidental and special fees will be made when courses are dropped after the week following the week of registration.

e. Room and board fees are refunded on the basis of full weeks remaining in the quarter.

TABLE I
EXPENSES EACH CALENDAR QUARTER
(All fees are subject to change without notice. See Page 24)

FULL-TIME STUDENTS

Fixed Fees

Incidental Fee	$159.00
*Room rent—air-conditioned residence hall	110.00
Room rent—other residence hall	90.00
No-Hours Privilege—specified residence halls (extra)	10.00
*Board	125.00

Other Fees When Applicable

Non-resident fee	$200.00
The Southerner	6.50
Post Office box, per quarter	1.25

*Note:

Hillcrest (Room and Board)	$280.00
Elam Arms (Room and Board)	280.00
Vann Hall (Room and Board)	255.00

PART-TIME STUDENTS—Each semester hour**

Incidental fee: graduate student	$ 24.00
Non-resident fee: graduate student	29.00

**These fees apply on all campuses.

TABLE II
SPECIAL FEES AND EXPENSES

Music Fees—Private Lessons for other than full-time music majors:

1 semester hour per instructor	$19.00 per quarter
2 semester hours per instructor	36.00 per quarter
3 semester hours per instructor	53.00 per quarter
Each additional supervised lesson	17.00 per quarter
Orchestral or Band Instrument rental*	6.00 per quarter

*This fee applies to music majors and minors as well as to other students.

Examinations and Degrees:	
Miller Analogies Test	$ 3.50 when applicable
Revalidation Examination	5.00 when applicable
Special Examination	3.00 when applicable
Application for Degree	
Master's	12.00
Specialist's	12.00
Doctoral	90.00
Thesis binding per copy	5.25 when applicable
Extension and Public Service	
Resident Center	
Graduate Course	24.00 per semester hour
Resident Center—Laboratory fee	6.00 per course
Resident Center—Typing fee	5.00 per course
Extension Center	
Graduate Course	24.00 per semester hour
Registration and Records:	
Change of Schedule	5.00 when applicable
Late Registration	10.00
Evaluation Fee for Foreign Students (non-refundable)	10.00 with application
Memorandum of Credits	.50 each
Transcript of Credits	1.00 when applicable

AVAILABLE FINANCIAL ASSISTANCE FOR GRADUATE STUDENTS

At present the University has available some 180 master's and 50 doctoral University fellowships in all areas as well as fellowships provided by federal and private agencies. Though amounts may vary from department to department, University fellowships average $1500 per year at the master's level and $2000 at the doctoral level and entail a teaching or research assignment. To maintain a fellowship, a student must have an average of B or better each quarter. Out-of-state tuition, though not the incidental fee, is currently waived for fellowship holders. The University also currently waives out-of-state tuition for students on sabbatical leave with pay from schools and colleges.

Inquiries regarding fellowships should be directed to the Dean of the Graduate School. Applications for fellowships must be filed by March 15.

The National Direct Student Loan, College Work-Study Program, and Insured Student Loans are also available to graduate students. Applicants for Direct Student Loans and College Work-Study program should apply by June 1 for loans and work to begin the fall term. Applications for the National Direct Student Loan, College Work-Study program, and Federally Insured Loan (Mississippi residents) may be secured by writing the Director of Student Aid

and Scholarships. Students who reside outside the State of Mississippi should contact their State Department of Education to determine source of Insured Loans used by their state.

PLACEMENT BUREAU

The function of the Placement Bureau is dual in nature. It provides assistance to graduating seniors, graduate students, and alumni in obtaining suitable employment, and to employers in recruiting qualified employees. The services are provided at no cost to the student or to the employer.

Throughout the year, current listings of employment opportunities, both in state and out of state, in teaching, business, industry, and government are made available to the students. Also, on-campus interviews are scheduled with personnel representatives from schools, businesses, industries, and governmental agencies. Students registered with the Bureau are notified of these interview schedules, and all who are interested are given the opportunity for individual interviews.

All seniors should register with the Placement Bureau and establish a confidential placement credential folder during the last quarter of their junior year, or the first quarter of their senior year. Graduate students may register any time they desire. These placement credentials are very valuable to on-campus recruiters and to those who telephone or write for information about prospective employees. After graduation and/or when the registrant has found suitable employment, the placement file is stored and may be quite helpful in later years if a registrant wishes to change employment or to enter graduate school.

PART FOUR

GENERAL ACADEMIC REGULATIONS AND REQUIREMENTS

GENERAL ACADEMIC REQUIREMENTS

It is reasonable to assume that a graduate student accepts full responsibility for knowing the policies and regulations of the Graduate School and the departmental requirements relevant to his individual degree program.

Only the general academic regulations and requirements governing all graduate programs are given below. Specific requirements pertaining to individual degree programs are outlined within the department sections.

Course Work and Grading System

Courses open to graduate students are those numbered 500 or above.

Many courses have certain prerequisites. A student who wishes to register for a particular course must satisfy the department concerned that he has had preparation adequate for admission of the course.

The grading system in the Graduate School is as follows:

A- Indicates that the student's work is of unusually high quality

B– Indicates that the student's work is of high but not exceptional quality.

C– Indicates that the student has met the minimum requirements for passing the course.

D– Indicates that the student's work is below that which is expected of a graduate student. A course in which the student has earned a grade of D will not apply toward a graduate degree. A student who earns more than six (6) semester hours in grades of D or below may not be considered as a candidate for a degree.

I– Indicates a course in progress.

F– Indicates that the student has failed the course. A student who accumulates more than three (3) semester hours of F grades will not be considered as a candidate for a degree. Retaking a course will not remove this disability.

G– Indicates withdrawal passing.

H– Indicates withdrawal failing.

An average of B or better is required of all candidates for graduate degrees by the time they complete the course-hour requirements for the degree.

In computing averages, a C must be balanced by one A , a D by two A's and an F by three A's of equal graduate credit.

On the recommendation of the student's committee or major professor, a student may retake one graduate level course in order to improve his grade point average.

The one-year limitation for an "Incomplete" to be removed does not apply to theses. The general regulation that degree work must be completed within a six-year period does apply.

Course Loads

I. Although the maximum load of a full-time graduate student is thirteen (13) semester hours, the normal load for a full-time graduate student is generally considered to be nine (9) semester hours; the normal time required for a master's degree is thus four quarters.

II. The minimum load for a full-time graduate student is seven (7) semester hours for the purpose of living in Pine Haven, using the services of the Clinic, for veterans affairs, and other such requirements.

III. The usual load for a part-time student with a full-time position is three (3) hours. A maximum of six (6) hours may be carried by such a student provided the faculty adviser and department chairman approve. (Teachers should note that the Mississippi State Department of Education allows a full-time teacher to take only three [3] hours per quarter.)

IV. Ten (10) hours is the maximum load for a graduate fellow teaching one undergraduate class or its equivalent. In no case may the total hours involved in a student's program, including both his course work and his fellowship assignment, exceed thirteen (13) hours.

V. The incidental fee for the full load of seven (7) semester hours will be the same amount as paid by graduates for a normal load of nine (9) hours.

VI. The courses numbered 697 and 797 - **Independent Study and Research** - may be taken for any amount of credit with the exception that students who are not in residence but who are actively working on a thesis, research problem, or dissertation and consulting with the major professor or making use of the library or other University facilities must enroll for three (3) semester hours each quarter.

MASTER'S DEGREE REQUIREMENTS

A convenient checklist of master's degree requirements may be procured in the Graduate Office.

I. **Credit Hours:**

A minimum of thirty (30) semester hours credit is required for any master's degree. Some departments require more than the minimum. Consult specific college and departmental requirements for additional information.

II. **Time Limitation:**

The student must complete the master's degree within six calendar years from the date of initial enrollment as a graduate student. Six years is the maximum age allowed for graduate credits toward a master's degree. If more than six years are needed to complete requirements, the Graduate Dean, under extenuating circumstances, may revalidate over-age credit hours if the original credit was earned at the University of Southern Mississippi and if the dean of the college or school concerned approves the revalidation. The revalidation is secured by the student's successfully passing a special examination on the course. However, any student who

fails to complete his master's degree program within the six-year time period becomes subject to any changes in degree requirements made at any date six years prior to his graduation. The fee charged for the special revalidation examination is $5.00 per course. The fee is to be paid before the revalidation examination is taken. Over-age extension courses can not be revalidated.

III. **Credit Hours Limitations:**

A. A minimum of twenty-one (21) semester hours must be earned at the University of Southern Mississippi.

B. A minimum of fifty per cent of the credit earned at the University of Southern Mississippi must be taken on the campus from which the degree is awarded.

C. A minimum of eighteen (18) semester hours must be in courses numbered 600 or above. Master of Business Administration degree candidates are permitted to take a maximum of one 500-level course.

D. As many as six (6) semester hours of graduate credit from other accredited institutions may be transferred to the student's program with the approval of the appropriate department chairman and the Graduate Dean provided that the course work transferred falls within the six-year period allowed for the degree.

E. As many as six (6) semester hours of course work taken by extension may be accepted toward the master's degree provided that such courses were taught by a member of the University of Southern Mississippi graduate faculty.

F. However, a student may apply a total of no more than six (6) semester hours by extension and/or transfer toward a master's degree, and, as previously stated, a total of no more than nine (9) semester hours of extension work, and work earned as a non-degree student may be applied toward a master's degree.

G. No more than nine (9) semester hours earned in institutes may be applied toward a master's degree.

IV. **The Master's Committee:**

The student's work toward the master's degree is supervised by a departmental committee composed of a chairman and two members recommended by the department chairman and appointed by the Graduate Dean.

V. **The Minor Field:**

If a minor field is required in the master's program, it shall consist of twelve (12) semester hours of course work.

VI. **The Master's Thesis:**

Although the degree of Master of Arts usually entails the writing of a thesis, the thesis requirements is optional with the departments for the Master of Science and the Master of Education degrees. Students intending to pursue a degree higher than the master's are encouraged to write a thesis.

A separate bulletin outlining University requirements concerning the

preparation of theses is available in the Graduate Office.

VII. Examinations:

A. The aptitude phase of the Graduate Records Examinations or the Admission Test for Graduate Study in Business is required for admission into the Graduate School. Individual departments may require the advanced area tests.

B. The Graduate School Foreign Language Test is required for some master's degrees, particularly the Master of Arts. Languages other than French, German, Spanish, and Russian must be approved by the department chairman and the Graduate Dean. Students may procure the proper registration forms in the Graduate Office.

C. In addition to regular course examinations, final comprehensive examinations are required for master's degrees. The major department will determine whether the comprehensive examination will be written or oral or both. The written comprehensive, if required, will be prepared by the student's committee and will cover the area of the major field. If an oral examination is required, the chairman of the student's committee will send written notices of the time and place of the examination to the examiners and to the student and will conduct the examination. Comprehensive examinations, whether written or oral, will be administered no later than the last week of the quarter in which the student expects to receive his degree and the results reported by the department chairman to the Registrar and to the Graduate Office no later than the last day for presenting signed theses to the Graduate Office. A student who fails the comprehensive examination may not retake the examination until its next regular administration and may repeat the examination only once.

SPECIALIST'S DEGREE REQUIREMENTS

The Specialist's degree earned in the Departments of Educational Administration and Supervision, Business Education, Curriculum and Instruction, Counseling and Guidance, Music, Music Education, Research and Human Development, Science Education, and Special Education provides sixth-year programs designed to prepare students for positions in school administration, advanced technical education for business, teacher training, counseling and guidance, and to develop research and evaluation specialists for the public schools. Individual programs and requirements are fully described in the departmental sections of this **Bulletin.**

Students who are seeking the specialist's degree must meet all degree requirements relating to the master's degree, must earn at least thirty (30) semester hours beyond the master's degree, must write an acceptable thesis and defend it in an oral examination, and must complete one full-time quarter of residence taking all nine (9) semester hours on the Hattiesburg campus.

Credit earned in institutes cannot be applied toward a specialist's degree.

THE MASTER OF PHILOSOPHY DEGREE REQUIREMENTS

The Master of Philosophy (M.Ph.) provides a directed semiterminal degree beyond the master's in a subject area primarily for the benefit of junior college faculties. At present the Southern Association of Colleges and Schools requires that "in all colleges at least forty percent of the teaching faculty should possess professional preparation equivalent to two years of advanced study beyond the bachelor's degree." This degree more than fulfills this requirement and in addition provides an intermediate stepping stone for the student who wishes to pursue the Doctor of Philosophy at a later time.

General Requirements

I. The program consists of a minimum of thirty (30) hours of work beyond the master's degree or sixty (60) semester hours beyond the bachelor's degree in one subject matter area of which no more than four (4) hours can be in thesis research. With departmental permission, a related minor of nine (9) semester hours can be elected. At least one-half of the work in both the major and minor areas must be in courses numbered 600 or above. No more than twelve (12) quarter hours or nine (9) semester hours by extension or transfer can apply to the degree nor is any institute or project credit applicable. Junior college teachers can substitute a course in the philosophy and administration of the junior college for one of their minor area courses.

II. Proficiency in a foreign language or, with departmental permission, in computer science and/or statistics is required unless the student's master program includes such a requirement.

III. One quarter of full-time work on the Hattiesburg campus constitutes the residency requirement for the degree.

IV. A departmental qualifying examination, a thesis of considerable scope, a written comprehensive examination covering the entire discipline, and a final oral examination of the thesis are required.

V. Since the work done for the Master of Philosophy degree is applicable to the Doctor of Philosophy degree, it can be awarded only by departments authorized to grant the Doctor of Philosophy degree, and all departments presently so authorized are permitted to grant the Master of Philosophy. At present, these areas are biology, chemistry, communication, comparative literature, English, history, microbiology, political science, polymer science, science education, and speech and hearing sciences.

Completion of the Doctor of Philosophy Degree

1. In order to achieve the Doctor of Philosophy degree the student holding a Master of Philosophy degree must take at least twenty-seven (27) additional hours of course work, of which nine (9) semester hours may be in research leading to the dissertation and of which eighteen (18) must be in courses numbered 600 or above.
2. He must spend three (3) consecutive quarters of full-time study on the Hattiesburg campus in order to fulfill the residency requirement.
3. He must achieve proficiency in a second language (or in computer science and/or statistics) if he has not previously done so.
4. He is required to take a rigorous written examination in the specialized area of his discipline in which he plans to write his dissertation.
5. He must write an acceptable dissertation and defend it orally.

DOCTORAL DEGREE REQUIREMENTS

A convenient checklist of doctoral degree requirements may be procured in the Graduate Office.

I. Credit Hours

All doctoral degrees entail a minimum of seventy-eight (78) semester hours of course work beyond the bachelor's degree or forty-eight (48) semester hours of course work beyond the master's degree.

II. Time Limitations:

Courses taken above the master's degree or its equivalent which will fit into the degree program but which are six or more years old at the time of admission to the advanced graduate program may be counted toward meeting degree requirements when recommended by the department chairman and approved by the Graduate Dean.

The degree requirements must be completed within a period of six years after the student has been admitted to advanced graduate standing at the University of Southern Mississippi.

III. Credit Hour Limitations:

A. A minimum of thirty-two (32) semester hours of work beyond the master's degree must be earned on the University's Hattiesburg campus.

B. Transfer of credit for graduate work done at other institutions must be approved by the department chairman and Graduate Dean. Final evaluation of an acceptance of transfer credit will not be made until the student has been in residence for one quarter. Transfer of credit for doctoral degree programs is limited to not more than six (6) semester hours or nine (9) quarter hours beyond the master's degree. Exceptions to this restriction may be made with the approval of the department chairman and the Graduate Dean.

C. No credit earned in institutes can be applied toward a doctoral degree.

D. No more than nine (9) semester hours earned as a non-degree graduate student may be applied toward a doctoral degree.

IV. **Residency:**

The residence requirement for a doctoral degree consists of three consecutive quarters during which the student devotes his full time to graduate work and so earns a minimum of nine (9) semester hours of credit for each of the three quarters.

A student who holds a fellowship or an assistantship may fulfill this residence requirement by earning a total of twenty-seven (27) hours of credit during consecutive quarters on the Hattiesburg campus of the University. The summer quarter may be counted in this sequence at the option of the candidate. A student may not fulfill the residency requirements if he is employed in a regular position.

V. **The Doctoral Committee:**

The student's work toward the doctoral degree is supervised by a departmental committee composed of a chairman and four members recommended by the department chairman and appointed by the Graduate Dean.

VI. **The Minor Field:**

If a minor field is required in the doctoral program, it shall consist of twelve (12) semester hours of course work and may consist of courses from a number of related areas.

VII. **Examinations:**

A. The aptitude phase of the Graduate Record Examinations or the Admission Test for Graduate Study in Business is required for admission into the Graduate School. Individual departments may require the advanced area tests.

B. The Miller Analogies Test is a departmental option for doctoral students in the College of Education and Psychology.

C. The foreign language and statistics requirements for the doctoral degree may be fulfilled in several ways:

1. The Doctor of Education degree does not require foreign language proficiency. However, the student must establish proficiency in statistics or computer science either by examination or by completing a prescribed course sequence, the credit hours for which do not apply toward the degree. Doctor of Music Education students refer to doctoral programs in music education.

2. The Doctor of Philosophy degree requires either (a) proficiency in two languages, (b) proficiency in one language and in statistics or computer science, or (c) proficiency in one language and the completion of a nine-hour minor, the hours for which do not apply toward the degree, or (d) proficiency in statistics and in FORTRAN, COBOL, or other computer programming language suitable to the degree program and research needs of the candidate. Proficiency in a specific computer language is to be certified by examination in that language devised and administered by the Department of Computer Science and Statistics. Languages other than French, German, Spanish, and Russian must be approved by the department chairman and the Graduate Dean. Foreign language proficiency will be accepted from another institution provided the examination was a part of a completed degree program. A student may satisfy the option of a foreign language by successfully completing at least nine (9) semester hours (or equivalent proficiency) in an approved foreign language with grades of C or better. The particular option followed by the student must have the approval of the department chairman and the Graduate Dean.

D. All students must have a written and/or oral doctoral qualifying examination in their field, and in the College of Education and Psychology in the **Foundations of Education** as well. This examination should be taken during the first or second quarter of the student's enrollment and is designed both to judge the student's fitness to pursue doctoral work and to guide his advisory committee in planning his program. The qualifying examination may be retaken only once.

E. At the completion of his course work and other examinations, the doctoral student is required to take a written and/or oral comprehensive examination in his major and minor field. If a student does unsatisfactory work on the comprehensive examination, he may be granted a second examination at the next regularly scheduled time, or later. His committee will recommend the conditions to be met before the examination may be repeated. The comprehensive examinations may be retaken only once.

F. After the dissertation has been accepted and after all required courses work has been completed, but at least four weeks before the candidate is scheduled to receive his degree, a final oral examination on the dissertation and related fields will be conducted by the student's advisory committee and any other faculty members designated by the Graduate Dean. The examination will be open to any member of the graduate faculty.

VIII. The Dessertation:

A. The dissertation topic must be approved by the student's major professor and advisory committee and must be an original contribution to knowledge in the chosen field.

B. A separate bulletin outlining University requirements concerning the preparation of dissertations is available in the Graduate Office.

C. The student should register for 898 – **Dissertation** – during the quarter in which he defends his dissertation.

IX. **Documents:**

The doctoral student must file a number of documents with the Graduate Office.

A. After his doctoral committee has been appointed and his qualifying examination completed but before he has passed twenty-seven (27) hours of doctoral course work, he should prepare in conjunction with his adviser a "Doctoral Planning Sheet," one copy of which is to go to each member of his committee and two copies to the Graduate Office.

B. After the student has completed all the requirements for the doctoral degree other than the dissertation but at least two quarters prior to graduation he should file two copies of the "Application for Candidacy" form with the Graduate Office and one copy with his adviser.

C. The student should present two copies of the "Application for Degree" form, properly stamped by the Business Office, to the Graduate Office during the quarter preceding that of graduation.

D. When completed, the student's file in the Graduate Office should contain in addition to the three documents described above statements from his adviser and/or department chairman appointing his doctoral committee, approving his dissertation prospectus, acknowledging the receipt of a first draft of his dissertation, and verifying the successful completion of his qualifying and comprehensive examinations and dissertation defense. Also contained in his file should be statements of proficiency in language and/or statistics.

PART FIVE

COLLEGE AND SCHOOL REQUIREMENTS

- SCHOOL OF BUSINESS ADMINISTRATION
- COLLEGE OF EDUCATION AND PSYCHOLOGY
- SCHOOL OF FINE ARTS
- SCHOOL OF HEALTH, PHYSICAL EDUCATION, AND RECREATION
- SCHOOL OF HOME ECONOMICS
- COLLEGE OF LIBERAL ARTS
- COLLEGE OF SCIENCE AND TECHNOLOGY
- SCHOOL OF SOCIAL WORK

SCHOOL OF BUSINESS ADMINISTRATION

Joseph A. Greene, Jr., Dean
Howard O. Jackson, Assistant Dean
Henry A. Gottleber, Coordinator of Graduate Studies

DEPARTMENTS AND GRADUATE DEGREE PROGRAMS

The School of Business Administration currently offers the following graduate degree programs: a Master of Business Administration, a Master of Science in Accounting, a Master of Science or Master of Arts in Economics, and a Master of Science in Telecommunications Management administered by USM–Gulf Park. The curricular requirements for each of these programs are detailed below.

A prospective student should examine each degree program carefully as to its objective, course content, and prerequisites before deciding which to pursue.

Graduate fellowships are available in each of the departments and the Bureau of Business Research within the School of Business Administration. Students with good undergraduate records are encouraged to apply for fellowships at the time they apply for admission to the Graduate School. The student must have regular graduate status and ordinarily must have achieved a 3.0 average on his last two years of undergraduate work to be eligible.

GRADUATE ADMISSION AND DEGREE REQUIREMENTS

All of the general academic regulations and requirements outlined in Part IV of this **Bulletin** apply to students pursuing graduate work in the School of Business Administration. Regular admission requires a minimum of 1,000 points based on the formula: 200 times the grade point average of the last two years of undergraduate study (4.0 scale), plus the Admission Test for Graduate Study in Business (ATGSB) score. A limited number of students may be admitted on a conditional basis if special circumstances warrant. Conditional admission requires the recommendation of one's adviser, the Dean of the School of Business Administration, and the Dean of the Graduate School. Students may begin their programs on a non-degree status provided they meet academic requirements and make provisions to take the ATGSB when it is next offered.

Students taking over fifty (50) per cent of their course work at other than the Hattiesburg campus will be awarded either USM–Gulf Park or USM–Natchez degrees. Admission of students into the Gulf Park and Natchez programs will be approved by their appropriate adviser, the Dean of the School of Business Administration, and the Dean of the Graduate School.

Gulf Park and Natchez courses to be applied to master's degrees in Business (M.B.A., M.S., or M.A.) must be taught by approved graduate faculty members of the School of Business Administration. Comprehensive examinations will be taken at the Hattiesburg campus with examination committees selected from members of the approved graduate faculty from the School of Business Administration.

DEGREE PROGRAMS IN BUSINESS ADMINISTRATION

Master of Business Administration

The Master of Business Administration program is primarily designed to prepare the student for a position of responsibility in business or industry. However, it is also used as preparatory graduate work for the doctoral degree or for teaching in junior colleges where a teaching certificate is not required. The program is broad in nature and aimed at developing general competence in overall management.

Research reveals that individuals with technical or other specialized degrees frequently discover that, after experiencing initially satisfying careers in their specialties, further promotions require a transition into the managerial area. The M.B.A. program supplements the education of the specialist and should enable him to make the transition more readily. For this reason, the M.B.A. program includes many students with undergraduate degrees in other fields as well as those who majored in business or economics as undergraduates.

The student who did his undergraduate work in some other field will have to spend additional time making up his deficiencies. Courses which are considered as definite prerequisites to the program are principles of accounting, principles of economics, and at least one course in each of the following fields: management, marketing, business law, business finance, and statistics. The major professor may ascertain other deficiencies upon examination of a transcript. A student who is deficient in these requirements may be allowed to remove the deficiency while doing graduate work provided that the undergraduate prerequisites of the specific graduate courses to be taken have been fulfilled.

The requirement for the Master of Business Administration degree may be completed in an academic year by the student who has graduated from an approved curriculum in a department or school of business and is exceptionally strong academically. Ordinarily the student spends a full calendar year completing the requirements.

A field emphasis may be taken in accounting, economics, finance, management, or marketing. A student who uses one of the curriculum courses in his field emphasis must substitute an acceptable 600 level course in another field in the curriculum. Master of Business Administration degree candidates are permitted to include a maximum of one 500 level course in their program.

The degree will be conferred upon candidates who (1) meet the general requirements of the Graduate School, (2) complete the special curriculum requirements as outlined below, and (3) pass an oral and/or written examination.

Curriculum Requirements	Hours
*ACC 625—Managerial Accounting	3
*ECO 625—Managerial Economics	3
**ECO 620—Statistics for Quantitative Analysis	3
*FIN 625—Managerial Finance	3
FIN 685—Business Environment	3
MGT 625—Human Relations in Business	3
MGT 670—Business Policy	3
*MKT 625—Seminar in Marketing	3
Field Emphasis	6
Electives	3
	33

*A student with an undergraduate degree in accounting, economics, finance, or marketing will make a proper substitution for the course in his department upon advice of his chairman.

Management 615, **Operation Research, may be substituted, especially by those students taking a field emphasis in management.

Master of Science in Accounting

The Master of Science in Accounting program is designed to prepare students for professional accounting positions in industrv, government, and public accounting. It may likewise be used as preparatory for additional graduate work at the doctorate level. It differs from the M.B.A. degree in that it is more highly specialized and directed precisely to the discipline of accounting. In addition to the accounting curriculum requirements, this program requires one minor field of twelve (12) hours which permits the student to pursue an in-depth study of a related discipline of his choosing.

Curriculum Requirements	Hours
ACC 605—Advanced Accounting Theory	3
ACC 610—Advanced Problems in Public Accounting	3
ACC 620—Advanced Cost Accounting and Controllership	3
ACC 630—Tax Planning and Research	3
ACC Electives or Thesis	6
Minor Requirements	12
Elective	3
	33

Master of Arts or Master of Science in Economics

The Department of Economics offers a program leading to a Master of Arts with a major in economics and a program leading to a Master of Science with a major in economics. The purpose of both programs is to prepare students for positions as economists in education, business, and government.

Under either program the student must meet the general requirements of the Graduate School. There is no language requirement for a Master of Science

degree and the thesis is optional with the student. A student pursuing the Master of Arts degree must demonstrate a proficiency in an approved foreign language and must also successfully complete an approved research project as evidenced by an acceptable thesis. The specific requirements for the two degrees are listed below.

The recommended graduate minor in economics constitutes a systematic study of the economic environment in which we live. Several advanced undergraduate courses which have been designed to provide appropriate instruction in economics to students in other major fields may be taken for graduate credit. The recommended graduate minor in economics consists of ECO 600, 605, and two electives.

In order to promote scholarship, fellowship, and the advancement of economics, all graduate students are encouraged to participate in the activities of the Economic Society, a student organization sponsored by the department. Graduate students who qualify may be offered membership in Omicron Delta Delta Epsilon (Artus), the national honorary economics society.

Curriculum Requirements	**Hours**
ECO 600—Microeconomic Theory	3
ECO 605—Macroeconomic Theory	3
ECO 610—Monetary Theory	3
ECO Electives	6
Minor Requirements	12
Electives or Thesis	6
(Thesis is optional for Master of Science only)	33

Master of Science in Telecommunications Management

The Master of Science in telecommunications management is an interdisciplinary program consisting of a major in management taught by the graduate faculty of the School of Business Administration, and a technical minor taught by qualified Air Force officers who have been approved as adjunct graduate faculty members at the University of Southern Mississippi. The purpose of the program is to provide the managerial and technical knowledge and skills necessary to function at the executive level in the management of technical communications and electronics systems in both military and civilian sectors.

An undergraduate degree in any of a wide variety of areas from any accredited university is acceptable for admission.

The Master of Science in telecommunications management is administered by USM—Gulf Park, under the academic direction of the School of Business Administration.

COLLEGE OF EDUCATION AND PSYCHOLOGY

Eric M. Gunn, Dean

Herman Boroughs, Coordinator of Graduate Studies

Requirements for Admission to Graduate Programs

Admission to the Graduate School for study in the College of Education and Psychology requires a specific grade point average and an appropriate GRE score. (See general admission requirements in Part III of this **Bulletin.**) Any individual who does not meet the general admission requirements may request additional consideration of his application by appealing to the appropriate department chairman. He may be admitted to a graduate program if he receives the approval of the department chairman, the Dean of the College of Education ans Psychology, and the Dean of the Graduate School.

Anyone holding a bachelor's degree from an accredited institution may be admitted as a non-degree graduate student. A non-degree graduate student is not considered to be in a graduate program leading to a degree. If the student demonstrates proficiency in graduate work, he may make application for a graduate degree program and, if approved, the student may use up to nine (9) semester hours of work taken as a non-degree graduate student in the degree program.

Those applicants who wish to study for a master's degree in any area of professional public school work should study for the Master of Education degree, and, therefore, must first hold or qualify to hold a Class A teaching certificate based on a baccalaureate degree in the area in which they wish to concentrate. A Master of Education degree applicant who does not yet qualify for an A certificate may be admitted to the Graduate School, but must meet the requirements of the State of Mississippi for an A certificate in teaching before the degree will be awarded. However, upon the recommendation of the departmental chairman, the Dean of the College of Education and Psychology may waive the requirements of satisfying certification requirements for those students currently employed or preparing for employment in junior or senior colleges, non-public institutions, or positions not requiring certification. In the event that certification requirements are waived, it is incumbent upon the student to recognize this limitation upon the scope of the areas within which he might seek employment in the future.

In the College of Education and Psychology, the minimum requirement for a master's degree is thirty-six (36) semester hours; the specialist's degree requires a minimum additional thirty (30) semester hours; and the doctoral degree requires a minimum of eighty-four (84) semester hours beyond the bachelor's degree.

Degree Programs Offered

The College of Education and Psychology offers graduate programs at three levels: master's degree, specialist's degree, and doctor's degree.

Master's Degrees: Master's degrees are offered in the following departments, with majors as indicated:

Department of Business Education
- Master of Science
- Master of Education

Department of Counseling and Guidance
- Master of Education in School Counseling
- Master of Science in
  - College Counsleing
  - Community Counseling

Department of Curriculum and Instruction
- Master of Education in
  - Elementary Education
  - Early Childhood Education
  - Secondary Education
- Master of Science in
  - Reading
  - Secondary Education

Department of Educational Administration and Supervision
- Master of Education in
  - Educational Administration
  - Supervision of Instruction

Department of Industrial and Vocational Education
- Master of Science

Department of Library Science
- Master of Arts
- Master of Science

Department of Psychology
- Master of Science
- Master of Arts

Department of Research and Human Development
- Master of Education

Department of Science Education
- Master of Science
- Master of Education

Department of Special Education
- Master of Education
- Master of Science

Specialist's Degrees: Specialist's degrees are offered in the following departments, with majors as indicated:

Department of Business Education
- Business Education

Department of Counseling and Guidance
Counseling and Guidance
Department of Curriculum and Instruction
Elementary Education
Emphasis in Reading
Secondary Education
Department of Educational Administration and Supervision
Administration of Occupational Education
General Administration
Secondary School Administration
Elementary School Administration
Curriculum and Supervision
School Business Management
Department of Research and Human Development
Adult Education
Educational Research
Media Technology
Department of Science Education
Science Education
Department of Special Education
Special Education

Doctoral Degrees: The following departments offer the Doctor of Education and/or the Doctor of Philosophy degrees:

Department of Counseling and Guidance
Department of Curriculum and Instruction
Elementary Education
Secondary Education
Department of Educational Administration and Supervision
Department of Psychology
General Psychology
Clinical Psychology
School Psychology
Developmental Psychology
Department of Research and Human Development
Adult Education
Department of Science Education
Department of Special Education

DEPARTMENT OF BUSINESS EDUCATION (BED – 105)

The Department of Business Education offers programs of study leading to the Master of Science degree in business education, the Master of Education degree in business education, certification in cooperative office education, and a specialist's degree in business education. Persons who plan to teach business subjects in junior and senior colleges, who desire Class AA certification in

secondary education, who desire certification in cooperative office education, or who desire additional training for employment in the business world can find a program suited to their professional goals. A person pursuing any one of these programs should have completed an undergraduate major in business teacher education. Candidates not having completed this major must become eligible for Class A certification as a business teacher as a prerequisite to the completion of all requirements for the first three programs listed. To be eligible for admission to the specialist's degree program, a person must present evidence of satisfactory scholarship in undergraduate and graduate study, hold a master's degree with a major in business education, have a well-defined professional goal, and meet other admission requirements of the University. The department requires a minimum score of 750 on the Graduate Record Examinations for admission to the master's degree program and a minimum score of 800 for admission to the specialist's degree program. Applicants must also meet general requirements for the Graduate School.

The appropriate master's degree will be conferred upon candidates who (1) meet the general requirements of the Graduate School and of the Department of Curriculum and Instruction; (2) complete the special curriculum requirements outlined below; and (3) pass an oral examination. In addition, a comprehensive written examination covering course content may be required by the Department of Business Education. A thesis is optional.

The specialist's degree will be conferred upon candidates who satisfactorily complete items (1) and (2) in the preceding paragraph, pass oral and written examinations, and complete a research problem.

A business student seeking the Doctor of Education or the Doctor of Philosophy degree may major in business education and earn the degree through the Department of Curriculum and Instruction.

MASTER'S PROGRAMS

The Master of Science Degree

Curriculum Requirements	Hours
FIN 640—Managing Financial Institutions	3
FIN 685—The Business Environment	3
*Electives in School of Business Administration	12
RED 601—Research: Its Introduction and Methodology	3
CIF 604—Foundations in American Education	3
BED 651—Principles of Business Education	3
BED 652—Seminar in Business Education	3
Electives or thesis	4
	31

The Master of Education Degree

Curriculum Requirements	Hours
EDUCATION: Nine (9) semester hours	
RED 601—Research: Its Introduction and Methodology	3
CIF 604—Foundations in American Education	3

EPY 740—Advanced Educational Psychology 3
BUSINESS ADMINISTRATION: Nine (9) semester hours
ECO 570—Comparative Economic Systems 3
MGT 625—Human Relations in Business 3
Electives 3
BUSINESS EDUCATION: Sixteen (16) semester hours
BED 608—Curriculums in Business Education 3
BED 651—Principles of Business Education 3
BED 652—Seminar in Business Education 3
BED 669—Measurement and Evaluation in Business Education 3
Electives or thesis 4

34

*Electives are to be chosen in consultation with the chairman of the department.

It is recommended that RED 601, the research course, be taken early in each program.

CURRICULUM FOR COORDINATORS OF BUSINESS AND OFFICE EDUCATION PROGRAMS

Persons who hold a Bachelor of Science degree with a major in business teacher education may take the three courses listed below to become certified as coordinators of business and office education programs.

Hours

BED 552—Philosophy of Vocational Business Education 3
BED 553—Coordination of Vocational Office Occupations Program 3
BED 670—Problems in Vocational Cooperative Office Education 3

SPECIALIST'S DEGREE

Curriculum Requirements

As part of the requirements for the Specialist's degree with a major in business education, a student must maintain satisfactory scholarship in completing the following course work:

Hours

1. **Required courses in basic education or equivalent** 15
   Select five:
   a. RED 601—Research: Its Introduction and Methodology 3
   b. CIF 604—Foundations in American 3
   c. CGE 610—Foundations in Guidance 3
   d. CIF 607—Basic Course in Curriculum Development 3
   e. EPY 740—Educational Psychology 3
   f. CIF 632—measuring Results in Education 3
2. **Area Major** (specialization in business education) 21
   a. BED 604—Foundations in Business Education 3
   b. BED 651—Principles of Business Education 3

c. Select two:
BED 653–Improvement of Instruction in Bookkeeping and Related Basic Skills 3
BED 654–Improvement of Instruction in Basic Business 3
BED 655–Improvement of Instruction in Typewriting and Related Skills 3
BED 656–Improvement of Instruction in Shorthand and Transcription 3
d. BED 701–Seminar in Business Education 3
e. Select one:
BED 750–Business Education in the Junior College 3
BED 760–Administration and Supervision in Business Education 3
f. BED 798–Research Problem 3

3. Related Field 15 hours

The related field selected should both complement and supplement the major area in rounding out the preparation for one of the career goals of the specialist's program. i.e., (a) advanced technical education for business; (b) teacher education; or (c) administration and supervision. Course credits earned in the basic courses in education are not applicable to the related field.

With the approval of the candidate's advisory committee, a related field may be selected from one of the following; (a) school administration; (b) guidance; (c) educational psychology; (d) vocational education; (e) techniques (research, statistics, and tests and measurements); (f) secondary education.

Also with the approval of the candidate's advisory committee, a combination of courses selected primarily from the foregoing fields may constitute a related field provided such selection contributes directly to the career goal of the candidate.

4. **Outside Minor** - field other than education 12 hours

A candidate purusing the Specialist's degree with a major in business education puruses an outside minor in business administration and/or economics.

5. **Elective courses** (eight [8] semester hours provided minimum hours are taken in the basic, major, related, and minor areas) 0-8 hours

Electives should be selected with approval of adviser to strengten the candidate's preparation for his chosen career goal.

Scholarship and Examination

In addition to achieving acceptable scores on admission examinations and maintaining satisfactory scholarship through the course work, a candidate will be required to achieve satisfactorily in both written and oral comprehensive examinations in business education.

Completion of Work for Degree

A candidate must complete the requirements for the Specialist's degree within six years from the date of admission to candidacy.

DEPARTMENT OF COUNSELING AND GUIDANCE (CGE – 140)

The Department of Counseling and Guidance offers programs at the master's, specialist's, and doctoral levels in guidance, counseling, and student personnel services. The programs are designed to provide specialized professional preparation in the areas of: (1) Elementary and Secondary School Guidance and Counseling; (2) College and University Student Personnel Work; (3) Community Counseling; and (4) Counselor Education and Supervision.

MASTER'S PROGRAMS

The department offers the Master of Education degree in school counseling, the Master of Science degree in college counseling, and the Master of Science degree in community counseling. The general requirements for these programs are as follows:

Admission: Admissions requirements for the master's degree programs are the same as the general University requirements for admission to graduate study at the master's level.

Admission to Candidacy. Candidacy is based upon:

1. An application for admission to candidacy, filed with the department upon the completion of nine (9) to twelve (12) semester hours of course work in the department.
2. Satisfactory completion of CGE 612 and 613.

Application For Graduation. Graduation is based upon:

1. Completion of a minimum of thirty-six (36) semester hours of course work in an approved program of studies.
2. Satisfactory completion of the comprehensive examination.
3. Satisfactory performance in the counseling practicum.

CURRICULUM PRESCRIPTIONS

The Master of Education Degree in School Counseling: (Secondary Emphasis). The course pattern is designed to provide learning experiences in the area of school guidance and counseling and will meet the professional and academic requirements for Class AA certification for secondary school counselors in Mississippi. A Class A secondary teaching certificate based upon a baccalaureate degree is a prerequisite for this program.

Required Courses (30 hours)	Hours
RED 601—Research: Its Introduction and Methodology	3
CIF 604—Foundations in American Education	3
CGE 610—Foundations, Organization, and Administration of Secondary Guidance	3
CGE 611—The Information Service	3
*CGE 612—Methods and Techniques of Counseling	3
*CGE 614—Analysis of the Individual	3
CGE 523—Methods and Techniques of Group Guidance	3
CGE 711—Guidance Consultation	3
**CGE 760—Counseling Lab I	3
CGE 696—Supervised Practicum	3
Elective Courses	6

*Prerequisite for CGE 760
**Prerequisite for CGE 696

The Master of Education Degree in School Counseling: (Elementary School Counselor - Consultant Emphasis). The course pattern for this program is designed to meet the specialized needs of individuals who desire to work as practitioners in elementary school settings. The program is developmental-preventive in focus, and is geared to preparing individuals to function effectively as counselors to pupils and as consultants to teachers, parents, and others. The curriculum will prepare the individual to meet the coursework requirements for Class AA elementary counselor certification in Mississippi.* A Class A elementary school teaching certificate is a prerequisite for admission to the program.

Required Courses: (33 hours)	Hours
RED 601—Research: Its Introduction and Methodology	3
CIF 604—Foundations of American Education	3
CGE 620—Foundations, Organization, and Administration of Elementary Guidance	3
CGE 611—Information Services in Guidance	3
***CGE 612—Methods and Techniques of Counseling	3
***CGE 614—Analysis of the Individual (Elementary Section)	3
CGE 711—Guidance Consultation	3
****CGE 760—Counseling Laboratory I	3
CGE 696—Supervised Practicum	3
CIE 728—Curriculum Problems in Elementary School	3
**CIE 733—Practicum in Diagnosis and Remediation of Reading Disability of the Classroom Teacher	3

In addition to the above required courses, three hours must be chosen from the following:

CIE 705—Modern Concepts in Reading Skill Development	3
CIE 729—Reading in the Elementary School	3

CIE 724—Problems of Teaching Arithmetic 3
CIE 725—Social Studies Education in the Elementary School 3
CIE 713—Advanced Diagnosis and Remediation of Reading Disability for the Classroom Teacher 3
Total 36*

*Three (3) additional hours in elementary education must be taken from the above in order to meet also the minimum state certification coursework requirements for a Class AA elementary teacher's certificate.

**If a student has not had CIE 713 or its equivalent, he must take it as a prerequisite for CIE 733.

***Prerequisite for CGE 760.

****Prerequisite for CGE 696.

The Master of Science Degree in College Counseling: The course pattern is designed to meet the professional preparation needs of a variety of individuals who expect to work in the broad field of college student personnel services. Providing a flexible program through the selection of electives and participation in variable field practicum experiences, the program is geared to the needs of college student personnel workers such as counselors, deans of men and women, directors of housing, directors of student affairs, directors of placement, directors of admissions, and registrars.

Required Courses: (24 hours) **Hours**

RED 601—Research: Its Introduction and Methodology 3
RED 712—The Junior College 3
or
AED 711—Higher Education in the U.S. 3
*CGE 612—Methods and Techniques of Counseling 3
*CGE 614—Analysis of the Individual 3
CGE 640—Student Personnel Work in Higher Education 3
**CGE 760—Guidance and Counseling Laboratory I 3
CGE 696—Supervised Practicum 3
CGE 740—Seminar in Student Personnel Problems 3
Elective Courses 12
Total 36

*Prerequisite for CGE 760
**Prerequisite for CGE 696

The Master of Science Degree in Community Counseling: The course pattern for this degree program is purposely broad and flexible. It is designed to prepare individuals for counseling and personnel roles in a variety of community agency settings such as vocational rehabilitation, employment placement, community mental health, family and social welfare, church ministry, and business. Special emphases are offered in alcholism and drug abuse, vocational rehabilitation counseling, and pastoral counseling.

Required Courses: (24 hours)	Hours
CGE 730–Introduction to Community and Rehabilitation Counseling	3
SOC 560–Methods of Social Research	3
or	
RED 602–Introduction to Statistics	3
*CGE 612–Methods and Techniques of Counseling	3
*CGE 614–Analysis of the Individual	3
**CGE 760–Guidance and Counseling Laboratory I	3
CGE 696–Supervised Practicum	3
CGE 736–Seminar in Problems of Rehabilitation	3
Elective Courses	12
Total	36

*Prerequisite for CGE 760
**Prerequisite for CGE 696

SPECIALIST'S DEGREE

The department offers the specialist's degree in counseling and guidance with emphasis on (1) School Counseling. (2) College Counseling and Personnel Work, and (3) Community Counseling. As a sixth year advanced degree program, the specialist's curriculum presupposes a master's degree in guidance or its equivalent and requires completion of an approved program of study including a minimum of thirty (30) hours credit beyond the master's degree, or sixty-six (66) semester hours beyond the baccalaureate degree.

The curriculum for the Specialist's degree is purposely designed to be flexible in order that candidates may develop greater specialization in an area related to their individual professional goals. Included in the course of study is a minimum of nine (9) semester hours credit in cognate areas and an approved field study. The general requirements for the Specialist's degree are as follows:

Admission

Admissions requirements for the specialist's degree program are the same as general University requirements for admission to graduate study at the specialist's level.

Admission to Candidacy

1. The application for admission to candidacy must be submitted upon the completion of nine (9) to twelve (12) semester hours of course work in the department beyond a master's degree in guidance or its equivalent.
2. Satisfactory completion of the qualifying examination.

Application for Graduation: Graduation is based upon:

1. Completion of an approved program of studies containing a minimum of thirty (30) semester hours credit beyond a master's degree in guidance or its equivalent or sixty-six (66) semester hours beyond the baccalaureate degree.

2. Satisfactory completion of a comprehensive examination.
3. Satisfactory completion, write-up, and defense of the field study.
4. Satisfactory performance in laboratory practicum.

DOCTORAL DEGREES

The department offers the Doctor of Education (Ed.D) and the Doctor of Philosophy (Ph.D.) degrees in counseling and guidance. General course requirements beyond the baccalaureate degree include a minimum of forty (40) semester hours work in the major area of counseling and guidance, a minimum of thirty (30) semester hours work in an interdisciplinary supporting minor, and the remainder of ninety (90) semester hours work in foundations excluding research tools (languages and/or statistics) and dissertation.

Working from a common core of courses in counseling and guidance, the student may develop from among the following program emphases a program of study which is consistent with his professional needs and career objectives:

A. **School Guidance.** This emphasis is designed for individuals who expect to work as counselors, guidance directors, and directors of pupil personnel services in school settings.

B. **Student Personnel Work in Higher Education.** This emphasis is designed for individuals who expect to work as student personnel specialists and deans in college and university settings. Standards prepared by the Commission on Professional Development of the Council of Student Personnel Associations in Higher Education and the Interdivisional Committee of the American Personnel and Guidance Association serve as guides in developing programs of study.

C. **Counseling Psychology.** This emphasis is designed for students who are preparing for positions in college and university counseling centers and in community agencies such as vocational rehabilitation, the Veterans Administration, and other agencies which utilize skills and competencies of doctoral-level counseling specialists. Student taking this emphasis typically are given greater exposure to counseling and psychological theory and engage in extensive laboratory practice in counseling with a broad range of clients.

D. **Counselor Education and Supervision.** This emphasis is designed for students who plan to engage in the teaching and training of counselors at the college and university level. Students in this program typically combine either the school guidance or student personnel emphasis with the counseling emphasis and, toward the end of their program, are placed in supervised internship experiences in counselor education and supervision.

General Requirements for the Doctoral Program

Admission

Admissions requirements for the doctoral programs are the same as general University requirements for admission to advanced study at the doctoral level.

Qualifying Examinations

1. Should be taken after completion of approximately eighteen (18) semester hours work in the department beyond a master's degree or equivalent in guidance.
2. May not be taken prior to completion of at least one quarter of on-campus laboratory counseling practicum.
3. May be retaken one time after an initial failure. Students may be asked to retake all or parts of the examination after complying with departmental recommendations regarding additional study and prepartion. Oral followups to the examination may be scheduled at the discretion of the department.
4. The results on a master's degree or specialist's degree comprehensive examination may not be substituted for this examination.
5. The doctoral advisory committee will be appointed, and the course planning sheet will be filed after satisfactory completion of the qualifying examinations.

Comprehensive Examinations

1. May be scheduled by individual appointment with the department chairman during or after the last quarter in which the student is enrolled in courses listed on the approved course of study.
2. Will consist of written and/or oral examination.
3. May be retaken one time after initial failure.
4. Must be completed a minimum of two quarters prior to graduation.

Residency

1. Completion of the doctoral residency requires full-time on-campus study for three consecutive quarters. During the residency period, students are expected:
   (a) To carry a minimum course load of nine (9) semester hours per quarter for three consecutive quarters or, in the case of students on one-half time University fellowships, twenty-seven (27) semester hours work in consecutive quarters.
   (b) To participate in a variety of credit and non-credit departmental activities including three quarters of CGE 810, laboratory and practicum experiences, individual case work, field trips, and other related professional activities.
   (c) To be relieved of job responsibilities with off-campus employers.

Admission to Candidacy

Admission to candidacy for a doctoral degree will be approved by the student's advisory committee upon:

1. Completion of language and/or statistics requirements. Doctor of Education candidates will meet intermediate level statistics proficiency; Doctor of Philosophy candidates must show proficiency in (a) one language and statistics or (b) statistics and computer science.
2. Completion of residency requirements.
3. Satisfactory completion of the comprehensive examination.
4. Approval of a dissertation prospectus. The dissertation prospectus may be presented to the advisory committee for approval any time after the comprehensive examination has been passed satisfactorily.

Application For Graduation: Graduation is based upon:

1. Completion of all requirements described above
2. Successful defense of the completed dissertation.

DEPARTMENT OF CURRICULUM AND INSTRUCTION

The Department of Curriculum and Instruction includes the areas of elementary education, early childhood education, reading, and secondary education. The department offers programs at the master's, specialist's and doctoral levels in these areas. The following degrees are offered:

Master of Education in Elementary Education
Master of Education in Early Childhood Education
Master of Science in Reading
Master of Education and Master of Science in Secondary Education
Specialist's Degree in Elementary Education
Specialist's Degree in Elementary Education with Emphasis in Early Childhood Education
Specialist's Degree in Elementary Education with Emphasis in Reading
Specialist's Degree in Secondary Education
Doctor of Education and Doctor of Philosophy in Elementary Education
Doctor of Education and Doctor of Philosophy in Elementary Education with Emphasis on Early Childhood Education
Doctor of Education and Doctor of Philosophy in Elementary Education with Emphasis in Reading
Doctor of Education and Doctor of Philosophy in Secondary Education

Only candidates holding a Class A certificate, or who exhibit willingness to meet Class A certification requirements at the undergraduate level prior to completion of a graduate degree program, will be admitted to the Department of Curriculum and Instruction. However, upon the recommendation of the departmental chairman, the certification requirement may be waived for a student pursuing a graduate degree in the area of secondary education who is currently

employed or preparing for employment in a junior or senior college, non-public institution, or for a position not requiring certification. In the event the certification requirement is waived, it is incumbent upon the student to recognize this limitation upon the scope of the areas within which he might seek employment in the future.

The Department of Curriculum and Instruction strongly recommends that a student gain teaching experience before completing the latter two-thirds of his master's degree program. No student will be eligible to receive a specialist's degree until he has completed at least one year of teaching experience. Three years of teaching experience is a requisite for a doctor's degree.

MASTER'S PROGRAMS

The Department of Curriculum and Instruction offers master's degrees in elementary education, early childhood education, reading and secondary education.

The program of study at the master's degree level is designed to increase the professional competency of the classroom teacher and to provide the course work necessary to meet standards of teaching certification at this advanced level.

The master's program requires regular admittance procedures, appointment of a graduate adviser, completion and submission of four copies of the application form for a master's degree at least one quarter in advance of the date of graduation, and successful completion of the comprehensive examination.

ADMISSION REQUIREMENTS

In order to be admitted on a regular basis to a master's degree program, an applicant must have a grade point average of at least 2.75 (figured on an A equals 4.0 scale) for the last two years of undergraduate study. In addition, the applicant must make a combined score of at least 750 on the aptitude sections (verbal and quantitative) of the Graduate Record Examinations.

If an applicant does not meet the above requirements for regular admission, he may be admitted to a master's degree program on a conditional basis in one of two ways:

1. By having a combined score of at least 750 on the aptitude sections of the Graduate Record Examinations and by having a grade point average no lower than 2.5, or
2. By having a grade point average of at least 2.75 if he has scored lower than 750 on the aptitude sections of the Graduate Record Examinations.

MASTER'S DEGREES

Master of Education Degree in Elementary Education — Hours

RED 601 – Research: Its Introduction and Methodology 3
CIF 604 – Foundations in American Education 3

CIE 706–Psychology of Reading 3
or
CIE 729–Reading in the Elementary School 3
AED 600–Basic Course in Educational Administration 3
CIE 728–Curriculum Problems in the Elementary School 3
CIF 632–Measuring Results in Education 3
EPY 774–Advanced Child Psychology 3
CIE 698–Thesis. Optional. Credit deferred until thesis is completed 6
In addition to the above required core courses, at least three courses (9 hours) must be chosen from the following:
SCE 730–Physics for Elementary School Teachers 3
SCE 731–Chemistry for Elementary School Teachers 3
SCE 732–Biology for Elementary School Teachers 3
SCE 733–Earth Sciences for Elementary School Teachers 3
CIE 724–Problems of Teaching Arithmetic 3
CIE 725–Social Studies Education in the Elementary School 3
CIF 660–Economic Education for Teachers 3
Total Hours-30 non-thesis program; 36 thesis program
Free Electives–6 hours non-thesis program

Master of Education Degree in Early Childhood Education **Hours**

RED 601–Research: Its Introduction and Methodology 3
CIF 604–Foundations in American Education 3
CIE 770–Practicum in Early Childhood Education 3
CIE 772–Practicum with Parents 3
CIE 777–Evaluation in Early Childhood Education 3
CIE 778–Creative and Mental Growth 3
CIE 776–Seminar in Early Childhood Education 3
or
CIE 780–Research in Child Development 3
CIE 698–Thesis. Optional. Credit deferred until thesis is completed 6
In addition to the above required core courses, at least two courses (6 hours) must be chosen from the following:
CIE 706–Psychology of Reading 3
or
CIE 729–Reading in the Elementary School 3
CIE 728–Curriculum Problems in the Elementary School 3
EPY 774–Advanced Child Psychology 3
Total Hours-27 non-thesis program; 33 thesis program
Free Electives-9 hours non-thesis program; 3 hours thesis program

Master of Science Degree in Reading **Hours**

RED 601–Research: Its Introduction and Methodology 3
CIF 604–Foundations in American 3
CIE 705–Modern Concepts in Reading Skill Development 3
CIE 706–Psychology of Reading 3
CIE 729–Reading in the Elementary School 3

CIE 754–Reading in the Secondary School 3
CIE 713–Advanced Diagnosis and Remediation of Reading Disability for the Classroom Teacher 3
CIE 733–Practicum in Diagnosis and Remediation of Reading Disability for the Classroom Teacher 3
SPE 511–Speech and Hearing Problems for the Classroom Teacher 3
AED 622–Supervision and Curriculum in Reading 3
CIE 698–Thesis. Optional. Credit deferred until thesis is completed 6
Total Hours-30 non-theis program
Free Electives-6 hours non-thesis program

Master of Education Degree and Master of Science Degree in Secondary Education Hours

Plan I (Thesis Program)
RED 601–Research: Its Introduction and Methodology 3
CIF 604–Foundations in American Education 3
EPY 740–Advanced Educational Psychology 3
CGE 610-Fundamentals of Guidance 3
or
CIS 708–High School Curriculum 3
or
CIF 632–Measuring Results in Education 3
CIS 698–Thesis. Credit deferred until thesis is completed 6

Plan II (Non-thesis Program)
RED 601–Research: Its Introduction and Methodology 3
CIF 604–Foundations in American Education 3
CGE 610–Fundamentals of Guidance 3
CIS 708–High School Curriculum 3
EPY 740–Advanced Educational Psychology 3
CIF 632–Measuring Results in Education 3

In addition to the above eighteen (18) hour core requirement of Plan I and Plan II, a minor of at least eighteen (18) hours must be taken in one of the following subject areas:

Art	Communication
Biology	Theatre Arts
Chemistry	Geology
Physics	Technical and Vocational Education
English	*Mathematics
Foreign Languages	**Science
Music	***Social Studies

*Courses in computer science and statistics may be included in this area.
**A combination of science courses may be used if the adviser determines that the need exists.
***Courses may be taken in any one or a combination of the following areas: History, geography, political sicence, sociology, and economics.

Under certain conditions, other minors may be selected with the approval of the department chairman.

SPECIALIST'S DEGREES

The Department of Curriculum and Instruction offers specialist's degrees in elementary education, secondary education, elementary education with emphasis in reading, and elementary education with emphasis in early childhood education. As a sixth year program, the specialist's degree program requires regular admittance procedures, appointment of a graduate adviser and committee, submitting an approved program of studies, and completion of an approved research study.

Course work within the specialist's degree programs includes the requirements outlined under the master's degree programs in addition to the requirements specified in this section.

ADMISSION REQUIREMENTS

In order to be admitted on a regular basis to a specialist's degree program, an applicant must have a grade point average no lower than 3.25 on previous graduate work and a combined score of at least 800 on the aptitude sections (verbal and quantitative) on the Graduate Record Examinations. If an applicant does not meet the above requirements for regular admission, he may be admitted to a specialist's degree program on a conditional basis in one of the two ways:

1. By having a combined score of at least 800 on the aptitude sections of the Graduate Record Examinations and by having a grade point average no lower than 3.00 on previous graduate work, or
2. By having a grade point average no lower than 3.25 on previous graduate work and by having a combined score of at least 750 on the aptitude sections of the Graduate Record Examinations.

Specialist's Degree in Elementary Education	Hours
RED 602–Introduction to Educational Statistics	3
CIF 818–Comparative Philosophies of Education	3
AED 620–Supervision of Instruction	3
EPY 720–Learning and Motivation I	3
or	
EPY 740–Advanced Educational Psychology	3
CIE 798–Research Problem	3
Total	15

In addition to the above required core courses, at least four courses (12 hours) must be taken in a subject field or fields.

Total Required Hours-27 minimum

Electives-3 hours

Specialist's Degree in Elementary Education With Emphasis in Early Childhood Education **Hours**

RED 602–Introduction to Educational Statistics 3
CIF 818–Comparative Philosophies of Education 3
AED 620–Supervision of Instruction 3
EPY 720–Learning and Motivation I 3
or
EPY 740–Advanced Educational Psychology 3
CIE 798–Research Problem 3
Total 15

In addition to the above required core courses, at least four courses (12 hours) will be taken in the area of early childhood education.

Total Required Hours-27 minimum
Electives-3 hours

Specialist's Degree in Elementary Education with Emphasis in Reading **Hours**

RED 602–Introduction to Education Statistics 3
CIF 818–Comparative Philosophies of Education 3
AED 620–Supervision of Introduction 3
EPY 720–Learning and Motivation I 3
or
EPY 740–Advanced Educational Psychology 3
CIE 798–Research Problem 3
Total 15

In addition to the above required core courses, at least four courses (12 hours) will be taken in the area of reading.

Total Required Hours-27 minimum
Electives-3 hours

Specialist's Degree in Secondary Education **Hours**

RED 602–Introduction to Educational Statistics. 3
CIF 818–Comparative Philosophies of Education 3
EPY 775–Advanced Adolescent Psychology 3
AED 704–School Community Relations 3
or
AED 620–Supervision of Instruction 3
CIS 798–Research Problem 3
Total 15

In addition to the above fifteen (15) hour core requirement, a minor of at least fifteen (15) hours must be taken in one of the subject areas listed under the heading **Master of Education Degree** and **Master of Science Degree in Secondary Education.** With the approval of the department chairman, a student who will be assuming major responsibility for reading programs at the secondary school or college level may use reading as the subject area (minor) for his specialist's degree.

Total Required Hours-30 minimum

DOCTORAL PROGRAMS

The Department of Curriculum and Instruction offers the Doctor of Education and the Doctor of Philosophy degrees in elementary education, secondary education, elementary education with emphasis in reading, and elementary education with emphasis in early childhood education. If a student desires to receive a Doctor of Philosophy degree he should follow one of the programs outlined in this section and, in addition, gain proficiency in a foreign language or computer programming language.

There are three distinct phases through which all students proceed in pursuit of the doctoral program. These include:

1. Phase One—involvement in procedures relative to general admittance requirements; appointment of a major professor; successful completion of the qualifying examinations; and appointment of the candidate's doctoral committee.
2. Phase Two—involvement in procedures relative to tentative program of studies, acceptance of prospectus, successful completion of the language and/or statistics requirements, completion of the residency and course work requirements, successful completion of the comprehensive examination, and admission to candidacy for a doctoral degree.
3. Phase Three—involvement in procedures relative to approval of dissertation.

ADMISSION REQUIREMENTS

In order to be admitted on a regular basis to a doctoral program, an applicant must have a grade point average no lower than 3.5 on previous graduate work and a combined score of at least 900 on the aptitude sections (verbal and quantitative) of the Graduate Record Examinations.

If an applicant does not meet the above requirements for regular admission, he may be admitted to a doctoral program on a conditional basis in one of two ways:

1. By having a combined score of at least 900 on the aptitude sections of the Graduate Record Examinations and by having a grade point average no lower than 3.25 on previous graduate work, or
2. By having a grade point average no lower than 3.5 on previous graduate work and by having a combined score of at least 850 on the aptitude sections of the Graduate Record Examinations.

DEGREES

Doctor of Education Degree in Elementary Education **Hours**

RED 752—Educational Research: Descriptive Statistical Methods 3
RED 753—Educational Research: Significance Tests and Research Design . . . 3
RED 896—Advanced Educational Research 3
CIF 816—History of Public Education in the United States 3
CIF 818—Comparative Philosophies of Education 3

EPY 720–Learning and Motivation I 3
or
EPY 740–Advanced Educational Psychology 3
AED 620–Supervision of Instruction 3
CIE 862–Seminar in Elementary Education 3
CIE 797–Independent Study and Research . . . . . Hours arranged
Not to be counted as credit toward a degree
CIE 898–Dissertation

In addition to the above twenty-four (24) hour core requirement at least twelve (12) hours must be earned in a subject field or fields and a minimum of nine (9) hours in cognate areas, preferably in the social sciences.

Electives should be chosen to complete a program consisting of a minimum of eighty-four (84) graduate hours, exclusive of the dissertation and statistics (RED 752, and RED 753), beyond the bachelor's degree. More than eighty-four (84) hours may be required in order to satisfy deficiencies which may exist in the student's background and preparation.

Doctor of Education Degree in Elementary Education with Emphasis in Early Childhood Education **Hours**

RED 752–Educational Research: Descriptive Statistical Methods 3
RED 753–Educational Research: Significance Tests and Research Design . . . 3
RED 896–Advanced Educational Research 3
CIE 816–History of Public Education in the United States 3
CIE 818–Comparative Philosophies of Education 3
EPY 720–Learning and Motivation 3
or
EPY 740–Advanced Educational Psychology 3
AED 620–Supervision of Instruction 3
CIE 862–Seminar in Elementary Education 3
CIE 797–Independent Study and Research . . . . . Hours arranged
Not to be counted as credit toward a degree
CIE 898–Dissertation

In addition to the above twenty-four (24) hour core requirement, at least twelve (12) hours must be earned in the area of early childhood education and a minimum of nine (9) hours in cognate areas, preferably in the social sciences.

Electives should be chosen to complete a program consisting of a minimum of eighty-four (84) graduate hours, exclusive of the dissertation and statistics (RED 752 and RED 753), beyond the bachelor's degree. More than eighty-four (84) hours may be required in order to satisfy deficiencies which may exist in the student's background and preparation.

Doctor of Education Degree in Elementary Education with Emphasis in Reading **Hours**

RED 752–Educational Research: Descriptive Statistical Methods 3
RED 753–Educational Research: Significance Tests and Research Design 3

RED 896–Advanced Educational Research 3
CIF 816–History of Public Education in the United States 3
CIF 818–Comparative Philosophies of Education 3
EPY 720–Learning and Motivation I 3
or
EPY 740–Advanced Educational Psychology 3
AED 620–Supervision of Instruction 3
CIE 862–Seminar in Elementary Education 3
CIE 797–Independent Study and Research 3
Not to be counted as credit toward a degree.
CIE 898-Dissertation.

In addition to the above twenty-four (24) hour core requirement, at least twenty-one (21) hours must be earned in the area of reading and a minimum of nine (9) hours in cognate areas, preferably in the social sciences.

Electives should be chosen to complete a program consisting of a minimum of eighty-four (84) graduate hours, exclusive of the dissertation and statistics (RED 752 and RED 753), beyond the bachelor's degree. More than eighty-four (84) hours may be required in order to satisfy deficiencies which may exist in the student's background and preparation.

Doctor of Education Degree in Secondary Education **Hours**

RED 752–Educational Research: Descriptive Statistical Methods 3
RED 753–Educational Research: Significance Tests and Research Design 3
RED 896–Advanced Educational Research 3
CIF 816–History of Public Education in the United States 3
CIF 818–Comparative Philosophies of Education
EPY 775–Advanced Adolescent Psychology 3
AED 704–School Community Relations 3
or
AED 620–Supervision of Instruction 3
CIS 797–Independent Study and Research 3
Not to be counted as credit toward a degree.
CIS 898–Dissertation.

The courses listed above will serve as a core program for students pursuing the doctoral degree in secondary education. The doctoral program consists of a minimum of eighty-four (84) graduate hours, exclusive of the dissertation and statistics (RED 752 and RED 753), beyond the bachelor's degree. More than eighty-four (84) hours may be required in order to satisfy deficiencies which may exist in the student's background and preparation. Of the total number of hours required of a doctoral student in secondary education, approximately one-half must be taken in one of the subject areas listed under the heading **Master of Education Degree** and **Master of Science Degree in Secondary Education.** With the approval of the department chairman, a student who will be assuming major responsibility for reading programs at the secondary school or college level may use reading as the subject area (minor) for his doctoral degree.

DEPARTMENT OF EDUCATIONAL ADMINISTRATION AND SUPERVISION (AED – 130)

The programs for the major in educational administration encompass the full range of administrative positions and lead to the master's degree, the specialist's degree, and the doctor's degree. Programs at the master's degree level provide preparation in the elementary school principalship, the junior high school principalship, the high school principalship, and supervision of instruction. Programs at the specialist's and doctoral levels provide preparation for the superintendency and central administrative staff positions. In addition, the program at the doctoral level provides preparation for college teachers of educational administration and persons desiring to prepare for administration in higher education.

The following course patterns for the different levels set forth only the minimum core requirements, and the electives selected to suit individual needs and objectives must be chosen with the advice and approval of the student's major professor. Therefore, it is mandatory that the student consult early in his program, and frequently thereafter, with his major professor concerning the selection of courses and sequence in which these courses will be taken.

DEPARTMENT POLICIES

The following departmental policies are supplementary to the rules and regulations of the University and the Graduate School as set forth elsewhere in this **Bulletin.**

PROGRAMS AND COURSES IN EDUCATIONAL ADMINISTRATION

MASTER'S PROGRAMS

Admission

Regular: A minimum grade point average of 2.75 and a combined score of 750 on the aptitude phase of the Graduate Record Examinations.

Conditional: Departmental action provided the student has a score of 750 or above on the aptitude section of the Graduate Record Examinations and a grade point average no lower than 2.5 or a grade point average of 2.75 or above if the Graduate Record Examinations score is below 750.

Application for Graduation Graduation is based upon:

1. Completion of an approved program of studies consisting of a minimum of thirty-six (36) semester hours.
2. Satisfactory completion of the comprehensive examination.

Educational Administration **Hours**

RED 601—Research: Its Introduction and Methodology 3
(Initial enrollment in the program must be in this course)
CIF 604—Foundations in American Education 3
CIF 607—Basic Course in Curriculum Development 3
EPY 740—Advanced Educational Psychology 3
AED 600—Basic Course in Educational Administration 3
AED 620—Supervision of Instruction* 3
AED 650—School Business Management* 3
AED 698—Thesis. Credit deferred until thesis is completed.** 4
Total 21 - 25 hours.

Electives—11 or 15 hours. Subject to the approval of the student's adviser, elective courses are to be taken as follows:

1. Nine (9) semester hours must be taken in Educational Administration and Supervision with one course selected from the following:
   AED 632—Organization and Administration of the Junior High School* 3
   AED 634—Secondary School Administration* 3
   AED 630—The Elementary School Principal* 3
2. The remaining elective courses may be taken in related areas.

*Prerequisite: AED 600.
**Required only of students writing a thesis

Supervision of Instruction **Hours**

RED 601—Research: Its Introduction and Methodology 3
(Initial enrollment in the program must be in this course)
CIF 604—Foundations in American Education 3
CIF 607—Basic Course in Curriculum Development 3
EPY 740—Advanced Educational Psychology 3
AED 600—Basic Course in Educational Administration 3
AED 620—Supervision of Instruction* 3
AED 720—Advanced Curriculum Development* 3
AED 738—Practicum in Supervision** 3
AED 698—Thesis. Credit deferred until thesis is completed.*** 4
Total—24 - 28 hours.

Electives—8 to 12 hours. These courses will be chosen from related areas subject to the approval of the student's major professor.

*Prerequisite: AED 600
**Prerequisite: AED 620
***Required only of students writing a thesis.

SPECIALIST'S DEGREES

Admission

Regular: A minimum grade point average of 3.25 on previous graduate work and a combined score of 800 on the aptitude phase of the Graduate Record Examinstions.

Conditional: A grade point average between 3.00 and 3.25 on previous graduate work and a Graduate Record Examinations score no lower than 800 or a grade point average no lower than 3.25 and a Graduate Record Examinations score between 750 and 800.

Application for Graduation. Graduation is based upon:

1. Completion of an approved program of studies as determined by the student's committee and which may consist of more than the minimum thirty-three (33) semester hours of credit required for graduation.
2. Satisfactory completion of the comprehensive examination.
3. Successful defense of the research project.

PROGRAMS

The specialist's degree students must have completed all courses or their equivalent in the master's degree program. Those courses not taken must be completed but will not count as part of the specialist's program. Additional electives are required for previously completed required courses.

A minimum of nine (9) semester hours in cognate areas is required in all of the specialist's degree programs. The department defines cognate areas as those courses which broaden and complement the student's program which are outside the areas of professional education. These courses and other electives will be chosen with the approval of the student's major professor and additional hours may be required to satisfy deficiencies in the student's program.

Administration

AED 700, 704, 706, 710, 720, 736, 738, 798.
Total—24 hours.
Electives—9 hours in cognate areas.

Secondary Administration

AED 704, 708, 710, 738, 798.
Total—18 hours.
Electives—15 hours with 9 in cognate areas.

Elementary Administration

AED 704, 710, 720, 738, 798.
Total—15 hours.
Electives—18 hours with 9 in cognate areas.

Curriculum and Supervision*

AED 708, 720, 738, 798; CIF 632; CIE 728; CIS 708.
Total—21 hours.
Electives—12 hours with 9 in cognate areas. AED 604 or CIF 619 is required as the first elective if any of the above courses have been completed prior to entering this program.

*AED 600 and 620, CIF 607, and EPY 740 are required prerequisites.

School Business Management*

AED 650, 698, 700, 704, 706, 708, 710.

Total–21 hours.

Electives–12 hours from business oriented courses.

Suggested courses are MGT 568, 572, 625; ACC 570; RED 712; FIN 640; BED 560.

*CIF 607, AED 600, and RED 601 are required prerequisites.

Administration of Occupational Education*

AED 650, 700, 706, 710, 712, 717, 719, 798 and IVE 711.

Total–24 hours from above, including AED 798.

Electives–9 hours selected from the following cognate areas:

Industrial Psychology, Management Training and Development, Economic Development, Advanced Labor Economics, and Economic Geography.

*AED 600, AED 620, and CIF 604 are required prerequisites.

DOCTORAL DEGREES

Admission

Regular: A minimum grade point average of 3.50 on previous graduate work and a combined score of 900 on the aptitude phase of the Graduate Record Examinations.

Conditional: A grade point average between 3.25 and 3.50 on previous graduate work and a Graduate Record Examinations score no lower than 900 or a grade point average no lower than 3.50 and a Graduate Record Examinations score between 800 and 900.

Qualifying Entrance Examination

1. Must be taken prior to the completion of eighteen (18) semester hours of study within the department.
2. May not be taken prior to the receipt of satisfactory GRE scores and the results of the Millers Analogies Test.
3. Regularly admitted doctoral students who fail the examination may repeat it upon the completion of nine (9) semester hours of credit after the quarter in which the examination was taken.
4. The results of a master's degree comprehensive examination may not be substituted for this examination.

Planning Sheet Planning sheets are completed after the qualifying examination has been passed and the committee appointed, but before the student has completed twenty-seven (27) semester hours.

Admission to Candidacy Admission to candidacy should be submitted one quarter prior to graduation and will be approved by the student's graduate committee upon:

1. Completion of an approved program of studies.
2. Satisfaction of the language and/or statistics requirement.
3. Completion of an approved dissertation prospectus.
4. Completion of the comprehensive examination.
5. Completion of the residency requirement, which consists of three consecutive quarters of full-time studies.

Application for Graduation Graduation is based upon.

1. Meeting the departmental and Graduate School deadlines for receiving completed dissertation.
2. Successful defense of the completed dissertation.

PROGRAMS

At the doctoral level, programs are provided in: (1) Public School Administration, and (2) Educational Administration with an emphasis in Higher Education. The general administration program provides preparation for the superintendent, other central office positions, and college teachers, while the program emphasizing higher education is designed to prepare administrators of higher education.

The doctoral program requires a minimum of eighty-four (84) semester hours beyond the bachelor's degree exclusive of the dissertation and proficiency in statistics. A minimum of thirty-two (32) semester hours must be taken on the Hattiesburg campus. The student's doctoral committee, appointed by the Graduate Dean, will approve the selection of required courses and electives and in order to secure breadth and depth in the student's preparation program may require more than the minimum number of hours. The student's program shall include a minimum of nine (9) semester hours of graduate credit in cognate areas, preferably in the social sciences. The department defines cognate areas as those courses which broaden and complement the student's program which are outside the areas of professional education.

Each doctoral student will be required to participate in a variety of laboratory and field experiences, many of which may not be connected with specific courses.

DEPARTMENT OF INDUSTRIAL AND VOCATIONAL EDUCATION (IVE - 165)

The Department of Industrial and Vocational Education offers programs leading to the Master of Science degree.

(1) **Major in Industrial Arts Education**: The student will be guided by the department chairman in selecting a minimum of twenty (20) semester hours from courses offered in the department, and twelve (12) semester hours in a minor area. The minor may include education, psychology, and guidance courses.

(2) **Major in Vocational Technical Education**: The student will be guided by the department chairman in selecting a minimum of twenty-one (21) semester hours offered in the department, and an additional twelve (12) semester hours in the administration and curriculum and instruction areas.

For admission into the department, the student must meet the general requirements for admission into the graduate school (Part III of this **Bulletin**) and make a minimum combined score of 750 on the GRE aptitude sections.

For additional information pertaining to the specific courses in the program, contact the department chairman.

DEPARTMENT OF LIBRARY SCIENCE (LS – 170)

The Department of Library Science participates in programs leading to the Master of Arts and Master of Science degrees. The general requirements for these degrees are outlined in Part IV of the **Graduate Bulletin**. A graduate student in library science must meet the general requirements for admission to the University's graduate program, scoring not lower than 750 on the combined aptitude sections of the GRE.

MASTER'S PROGRAMS

Master of Science Degree

Students desiring to specialize in school library media programs should take a minimum of twelve (12) courses (36 semester hours) in the combined fields of library science, audiovisual media, and professional education. Students planning to use this program for a Mississippi Class AA certificate in library science must meet the requirements for the Class A certificate.

Professional requirements include RED 601 (**Research: Its Introduction and Methodology**), CIF 607 (**Basic Course in Curriculum Development**), and EPY 740 (**Advanced Educational Psychology**) or EPY 746 (**Social Processes in Classroom Learning**). Departmental requirements include: LS 570 (**Selection of Multi-Media Materials and Services**), LS 571 (**Library Preparation and Production of Multi-Media Materials**), LS 572 (**Administration and Supervision of School Media Centers**), LS 601 (**Building Library Collections**), LS 604 (**Reference Resources and Services**), LS 608 (**Principles of Cataloging and Classification**), LS 655 (**Library Service to Young People**), LS 665 or 666 or 667. (**Bibliography of the Humanities, Social Sciences, or Science Technology**), and LS 668 (**Research Methods in Library Information Science**).

Master of Arts Degree

Students desiring to prepare for positions in public, college, and special library fields should follow a Master of Arts degree program. For the Master of Arts degree, a minimum of thirty-six (36) semester hours is required. Of these credits, twenty-four (24) should be taken in library science and should include

courses in the following core areas of librarianship: LS 601 (**Building Library Collections**), LS 604 (**Reference Resources and Services**), LS 608 (**Principles of Cataloging and Classification**), LS 660 (**Introduction to Information Science and Technology**), and one of the three bibliography courses, LS 665, 666, or 667 (**Bibliography of the Humanities, Social Sciences, or Science and Technology**).

Reading proficiency in a foreign language is required of candidates for the Master of Arts degree. Students who have satisfactorily completed at least nine semester hours of study of a language at the undergraduate level will be certified as having obtained this proficiency. Others may meet this requirement through examination. With the permission of the department chairman and the Graduate Dean, expertise in a computer programming language such as Fortran or COBOL may be substituted for a foreign language. The writing of a thesis is optional.

DEPARTMENT OF PSYCHOLOGY (PSY – 175)

The Department offers the Master of Arts, the Master of Science, and doctoral programs in general psychology, in clinical psychology, in developmental psychology, and in school psychology. The general requirements for master's and doctoral degrees are listed in Part IV of this **Bulletin**.

For regular admission to graduate study in psychology, a student must: (1) have completed undergraduate foundation courses in statistics and experimental psychology (courses in physiological psychology, psychological measurement, psychology of learning, psychology of personality and the history of psychology are highly recommended); (2) have a B average or better in his undergraduate major; and (3) have a minimum total score (quantitative plus verbal) of 1,000 on the aptitude section of the Graduate Record Examinations. Students who are unable to meet these requirements will be considered for conditional admission to the program. Students seeking admission to graduate study at the post-master's level must meet the requirements for regular or conditional admission listed under Types of Admission to Advanced Graduate Study in Part III of this **Bulletin**. In addition, the student is required to come to the campus for a personal interview as a part of the application procedure for advanced standing.

MASTER'S PROGRAMS

The Master of Arts Degree in Psychology

This degree program is planned to prepare students for advanced graduate work at the doctoral level, or to teach in junior or senior colleges, or to work in certain research settings. Candidates must pass the foreign language requirement and are required to write a thesis. Core courses for this degree includ PSY 694, EPY 720, PSY 721, PSY 724, PSY 735, PSY 755, PSY 762, PSY 763, and PSY 698.

The Master of Science Degree in Psychology

This degree plan is essentially a professional-training, terminal program with emphasis on formal course work and paralleling practical experiences designed to prepare students for immediate employment in practical situations. Students may choose from two emphases: (a) school psychology, and (b) mental health psychology. Core courses for both programs include PSY 694, PSY 721, PSY 735, PSY 762, PSY 787, PSY 788, and work in either PSY 736 and/or EPY 784. Neither a foreign language nor a thesis is required. The program normally requires two years to complete.

THE DOCTOR OF PHILOSOPHY DEGREE

The sequence of courses leading to the Doctor of Philosophy degree in general psychology is planned to prepare students to be college and university teachers of psychology, or to become research workers in a variety of settings, including universities, governmental agencies, schools and hospitals, and industry.

The Doctor of Philosophy degree in clinical psychology is planned to prepare students for diagnostic, psycho-therapeutic and research work in a variety of settings which represent programs for community-wide prevention or amelioration of mental illness. The sequence of courses and other experiences provided for these students is outlined according to American Psychological Association standards. Included in the program are wide practicum and internship experiences both in the University Clinic, mental hospitals, and in community mental health and mental retardation settings.

The doctoral program in developmental psychology is designed to prepare students to be college and university teachers and to conduct basic and applied research in the various areas of developmental psychology. An interdepartmental sequence of courses stresses the theorectical and empirical foundations of child and adolescent psychology as well as various areas emphasizing exceptional children. Developmental research is encouraged in conjunction with the experimental, clinical, or school programs within the department. In addition, campus facilities for observational studies and child research include the Infant Development Center and the University Nursery and Kindergarten schools and a mobile Developmental Laboratory.

The doctoral program in school psychology consists of a sequence of courses and other experiences which prepare students for a variety of psychological services in schools, or to conduct research in schools on psychological development, learning and pupil-teaching interaction, psychological measurement, educational psychology, and psycho-educational processes.

The prerequisite for admission to the program leading to a degree in the areas of general psychology, clinical psychology, or developmental psychology is a master's degree with course work comparable to that listed above for the Master of Arts degree in psychology. In the area of school psychology, a master's degree with course work comparable to that listed above for the Master of Science degree in psychology. Students who have completed their master's

degree at another institution are required to pass a qualifying examination. All students must meet the University's language requirement, pass a comprehensive examination, and write and defend a dissertation. A one- year internship in an approved setting is required of a student completing a degree in clinical and school psychology.

Students contemplating graduate work in psychology are invited to communicate directly with the Department of Psychology.

DEPARTMENT OF RESEARCH AND HUMAN DEVELOPMENT (RED – 135) (CIF – 125) (CIA – 110)

The Department of Research and Human Development provides supportive services in teacher education. At the graduate level, these services include Educational Foundations, Educational Media, Research Training, and Adult Education. The Master of Education and the specialist's degree are offered in educational media and technology. The Specialist's degree or a doctoral minor is offered in educational research. The Master of Education, Specialist's and Doctor of Education degrees are offered in adult education.

PROGRAMS IN EDUCATIONAL MEDIA AND TECHNOLOGY

Master of Education in Educational Media and Technology

This degree program is designed for those persons who plan to serve as media specialists or other curriculum workers in the public schools, junior colleges, or other educational agencies.

General admissions requirement for master's programs as found in Section Three of this **Bulletin** will apply. The applicant must present a combined score of 750 or above on the aptitude sections of the Graduate Record Examinations.

Curriculum Requirements	Hours
RED 601–Research: Its Introduction and Methodology	3
RED 602–Introduction to Educational Statistics	3
or	
CIF 632–Measuring Results in Education	3
CIF 604–Foundations in American Education	3
CIF 607–Basic Course in Curriculum Development	3
CIF 619–Utilization, Selection, and Preparation of Audiovisual Materials	3
CIF 735–Advanced Production Techniques (Audiovisual)	3
EPY 740–Advanced Educational Psychology	3
AED 604–Administration of Audiovisual Communications Programs	3
AED 620–Supervision of Instruction	3

In addition to the above required core courses, at least one course (3 hours) must be chosen from the following:

CIE 728—Curriculum Problems in the Elementary School 3
CIS 708—High School Curriculum 3
AED 713—Curricula in Higher Education 3
In addition to the above required core courses, at least two courses (6 hours) must be chosen from the following:
LS 660—Introduction to Information Science and Technology 3
CIF 740—Programmed Instruction 3
CIF 741—Instructional Graphics 3
CIF 742—Research in Instructional Systems Technology 3
CIF 728, CIS 708, or AED 713, if not used to meet the above requirement, may be elected 3

Specialist's Degree in Educational Media and Technology

This program is intended to prepare individuals for careers as media specialists, curriculum consultants, and library media directors. It satisfies requirements for AAA certification in Mississippi as well as for media specialist certification in most states. As a sixth year program, the specialist's curriculum presupposes a master's degree in audiovisual media, library science, industrial technology, or curriculum and research, and a minimum of three years teaching experience.

The specialist's degree program requires regular admittance procedures to the Graduate School, appointment of a graduate adviser, and the filing of an approved program of studies.

In order to be admitted as a regular graduate student in the specialist's program, an applicant must have a grade point average no lower than 3.25 on previous graduate work and a combined score of at least 800 on the aptitude sections of the Graduate Record Examinations.

If an applicant does not meet the above requirements for regular admission, he may be admitted to a specialist's program on a **conditional** basis as outlined in Part Three of this **Bulletin**

Curriculum Requirements

A minimum of fifteen (15) semester hours in advanced professional education is required of all candidates for the specialist's degree in educational technology. The media bloc of eighteen (18) hours shall be chosen with the approval of the media adviser. Additional courses may be required to satisfy any deficiencies in the student's academic background and professional training.

Professional Education (15 hours) from the following listing:* **Hours**
CSS 640—Educational Statistics: Introduction to computer technology, Cobol, Fortran) 3
or
RED 602—Introduction to Educational Statistics. 3
or
RED 601—Research: Its Introduction and Methodology 3

CIF 607—Basic Course in Curriculum Development. 3
or
AED 611—Advanced Curriculum Development. 3
AED 638—Practicum in Supervision. 3
or
AED 620—Supervision of Instruction 3
EPY 740—Advanced Educational Psychology 3
or
EPY 746—Social Processes in Classroom Learning 3
CIF 798—Research Problem 3
*Appropriate substitutions of other graduate education courses may be made with the permission of the media adviser.

Media Bloc

A minimum of six courses (18 hours) must be taken in audiovisual media and educational technology, including a choice of courses from the fields of library science, computer technology, and research. Due to the diverse background of candidates seeking a specialist's degree in educational technology, no set pattern of courses will be required in the media bloc. With the approval of the media adviser, each candidate shall choose a planned sequence of courses from the following listing:*

Hours

CIF 619—Utilization, Selection and Preparation of Audiovisual Material. Quarterly 3
CIF 735—Advanced Production Techniques. Fall and Summer 3
AED 604—Administration of Media Programs. Winter and Summer 3
CIF 740—Programmed Instruction. Fall and Summer 3
CIF 741—Instructional Graphics. Winter 3
CIF 743—Production of Educational Television. Spring 3
CIF 742—Research in Instructional Systems and Technology. Fall and Summer 3
CIF 744—Instructional Development I. Fall 3
CIF 720—Foundations of Educational Technology. Winter 3
CIF 745—Computers in Education. Spring and Summer 3
RED 712—Computer Applications in Educational Research. Fall and Summer . 3
CIF 701—Analysis of Teaching Behavior. Summer 3
CIF 736—Designing Educational Systems. Spring and Summer 3
CIF 798—Research Problem. 3
LS 660—Introduction to Information Science and Technology. Fall 3
LS 661—Library Automation 3
LS 662—Information Retrieval Systems. Winter 3
LS 668—Research Methods in Library and Information Sciences. Summer . . . 3
*Substitution may be made from other graduate library science, computer technology or research courses with the approval of the media adviser.

EDUCATIONAL RESEARCH TRAINING (RED – 135)

The program in educational research offers the student three options:

1. A structured minor in educational research at the doctoral level.
2. A specialist's degree. (For information see below.)
3. A choice of a number of advanced research courses as additional course electives in the student's major or minor field.

MINOR

The structured minor in educational research at the doctoral level provides for maximum flexibility in meeting the unique needs for research training in the departmental major fields. A total of twelve (12) hours **plus** RED 752 and 753 constitute the minimum requirements.

The required courses should be viewed as a minimum basis for training in educational research and are designed to prepare the student for more advanced study. Additional advanced courses offered in educational research are recommended for qualified students. Students desiring emphasis in psychology orientation may substitute equivalent statistics and design courses offered in the area of psychology. Such substitutions must be approved by both departments.

Curriculum Requirements*	**Hours**
CSS 540–Educational Statistics**	3
or	
RED 712–Computer Applications in Educational Research	3
RED 752–Advanced Correlational Methods	3
RED 753–Significance Tests and Design	3
RED 793–Advanced Educational Research	3
RED 824–Research Design in Educational Research	3
RED 830–Multivariate Analysis	3
Total	18

*Prerequisites:
(1) Basic courses consisting of RED 601, 602, and CIF 632 are recommended.
(2) A grade point average of 3.0 in RED 752 and 753 is required.
**CSS 540 should be taken if pursuing the Ph.D. degree.

Suggested Educational Research Electives	**Hours**
CSS 540–Educational Statistics	3
RED 718–Practicum in Educational Research	3
RED 794–Special Problems I, II, III	1
RED 824–Design in Educational Research	3
RED 891–Field Problems in Educational Research	1-9

Specialist's Degree

The specialist's degree is designed to provide advanced training in educational research and will serve three major purposes: (1) A terminal program at

the specialist's level for individuals not pursuing the doctoral degree; (2) An advanced research training program for individuals desiring specialization in research in addition to their major areas at the doctoral level; and (3) A variety of electives to meet special needs of individuals who are not seeking specialization in educational research.

Students desiring emphasis in psychology orientation may substitute equivalent statistics and design courses offered in the area of psychology. Such substitutions must be approved by both departments.

Admission to the specialist's degree program is contingent upon the student's meeting the general admission requirements of the Graduate School and scoring a minimum of 800 on the aptitude sections of the Graduate Record Examinations.

Curriculum Requirements*	Hours
RED 712—Computer Applications in Educational Research	3
RED 720—Measurement in Educational Research	3
RED 752—Advanced Correctional Methods	3
RED 753—Significance Tests and Designs	3
RED 793—Advanced Educational Research	3
RED 798—Research Problem	3
RED 824—Design in Educational Research	3
RED 830—Multivariate Analysis	3
Total	24
**Electives	8

*Prerequisites:
(1) Basic courses consisting of RED 601, 602, and CIF 632 are recommended.
(2) A grade point of 3.0 in RED 752 and 753 is required.

**Electives in areas other than Educational Research are encouraged in order that they may provide additional experiences for the student.

Suggested Educational Research Electives	Hours
CSS 540—Educational Statistics	3
RED 718—Practicum in Educational Research	3
RED 791—Field Problem in Educational Research	3
RED 792—Special Problems I, II, III	1

PROGRAMS IN ADULT EDUCATION

These programs, by nature interdisciplinary and flexible, offer personnel from all types of adult educational agencies opportunities for upgrading and building on professional experience. Such agencies include vocational-technical center, industrial organizations, the armed forces, civic organizations, public school systems, junior and senior colleges, universities, the Cooperative Extension Service, regional development groups, and others. AA and AAA certification requirements as set by the Mississippi Department of Education may be met through these program.

In accordance with admisssions procedures, the student, in collaboration with his appointed adviser, will work out a program of studies reflecting his long term goals and interests.

Master of Education in Adult Education

To be admitted to the master's program on a regular basis the applicant must have an undergraduate grade point average of 2.75 and a combined score of 750 or above on the aptitude sections of the GRE. An applicant not meeting the requirements of regular admission may be admitted on a conditional basis as specified in Part Three of this **Bulletin**

Curriculum Requirements

CIA 601—Principles of Adult Education
EPY 576—Learning in Adult Education
CIA 540—Methods and Materials in Adult Education
or
IVE 535—Instructional Materials for Industrial Education
or
CIF 619—Utilization, Selection, and Preparation of Audiovisual Materials
CIA 607—Program Planning and Curriculum Development in Adult Education
CIF 604—Foundations of American Education
RED 601—Research: Its Introduction and Methodology

In addition to the eighteen (18) hours specified above, a minimum of twelve hours (12) or four courses is to be selected that relates to the student's goal. These courses must be approved by the student's adviser.

Specialist's Degree in Adult Education

To be admitted to the specialist's program on a regular basis the applicant must have a grade point average no lower than 3.25 and a combined score of 800 or above on the aptitude section of the GRE. An applicant not meeting these requirements may be admitted conditionally as specified in Part Three of this **Bulletin.**

Curriculum Requirements

A minimum of thirty (30) hours of graduate work beyond the master's level with fifteen (15) hours in adult education and educational foundations, including any of the specified courses for the Master of Education not previously taken, is required along with:

CIA 797—Independent Study and Research
CIA 798—Research Problems

Four elective courses for twelve (12) hours are required. These courses of study may be selected from the content area of interest, goal-related interest, of the student or from relevant behavioral sciences with the approval of the student's adviser.

Doctor of Education in Adult Education

To be admitted to the doctor's program on a regular basis the applicant must have a grade point average of 3.50 and a combindd score of 850 or above on the aptitude sections of the GRE. An applicant not meeting the requirements of regular admission may be admitted on a conditional basis as specified in Part Three of this **Bulletin.**

Curriculum Requirements

A minimum of fifty-four (54) hours beyond the master's degree is required. For this degree the student will select an area of emphasis from which to focus a research study from one of the following areas:

1. Organization and Administration of Adult Programs;
2. Programming, Curriculum, and Instructional Development for Adults;
3. Foundations and Contemporary Nature of Adult Education.

The program for individual students worked out in collaboration with the adviser must provide for competency in: (1) The general field of adult education in the contemporary world, (2) education foundations, (3) psychology of adult learning, (4) social setting of adult learning, and (5) specific understanding required for the student's particular area of interest.

A minimum of four courses, twelve (12) hours, should be selected as supporting cognates or electives from the behavioral sciences. All students in these programs will complete RED 752, RED 753, CIA 797 and CIA 898 (Dissertation) as part of their program.

DEPARTMENT OF SCIENCE EDUCATION (SCE – 380)

The Department of Science Education, recognizing the increased emphasis on the art of science teaching and the additional opportunities for individuals with advanced training in these arts, provides a program for the Master of Arts, the Master of Science, the Specialist's, the Doctor of Philosophy, and the Doctor of Education degrees in Science Eduation.

Any student who has successfully completed a Bachelor of Science or Bachelor of Arts degree in any area of science or combination of sciences, or has an equivalent academic preparation in the sciences, who demonstrates a minimum score on the aptitude section of the GRE of 750 for a master's, 800 for a specialist's, and 850 for the doctoral degrees, who has a grade point average of at least 3.0 for a master's and 3.25 for a specialist's, and who meets the requirements set forth by the Graduate School of the University of Southern Mississippi is eligible to pursue a program in science education. A student who does not meet all of the above requirements may be admitted conditionally.

In addition to the general requirements and procedures pertaining to graduate degrees as outlined in Parts III and IV of this **Bulletin**, the following requirements must be fulfilled:

MASTER'S PROGRAMS

1. Completion of forty-three (43) or forty0five (45) semester hours of graduate work.
2. A minimum of eighteen (18) semester hours in a specific science—biology, chemistry, earth and environmental sciences, or physics.
3. A minimum of six (6) hours in related sciences.
4. Demonstration of competence in the following Professional Education areas:
   (a) Psychology of learning
   (b) History and philosophy of education
   (c) Statistical methods and procedures in education
   (d) Research methods in education
   (e) Guidance and educational testing
   (f) Public school science curriculum
   (g) Problems in science teaching

Generally, the fulfillment of the above requirements will involve:

A. Nine (9) to fifteen (15) semester hours in professional education.
B. Twenty-eight (28) to thirty-six (36) semester hours in the sciences and science education.

Approximately one-third of the graduate work will be in professional education and two-thirds in the sciences. Students with sufficient background are not required to take additional courses in professional education, but will complete their programs in the sciences.

A thesis carrying four semester hours is optional and would substitute for two courses in education. The total program with thesis requires forty-three (43) semester hours graduate credit. The thesis may involve research in a particular science or research in science education.

SPECIALIST'S DEGREE

(1) Complete thirty-six (36) semester hours of graduate work beyond the master's level with
(2) A minimum of fifteen (15) semester hours in a specific science—biology, chemistry, earth and environmental sciences, and physics, plus six (6) hours in a related science, or mathematics
(3) Complete six (6) to nine (9) semester hours of work each in professional education and science education, and
(4) Demonstrate competence in the area of professional education as listed above
(5) Demonstrate competence in thesis writing by selecting a topic, doing research, and reporting the findings.

DOCTORAL PROGRAM

(1) Completion of a minimum of fifty-four (54) semester hours of graduate work above that accepted at the master's level.
(2) A minimum of eighteen (18) semester hours in a specific science—biology, chemistry, earth and environmental sciences, or physics.
(3) A minimum of six (6) semester hours in related sciences.
(4) Competence in the areas of professional education as listed above.

Generally, the fulfillment of the above requirements will involve:

A. Nine (9) to eighteen (18) hours in professional education.
B. Twenty-four (24) or more hours in the sciences.
C. Nine (9) or more hours in science education.

In all, two-thirds or more of the graduate work will be in the sciences and science education. In planning the overall program consideration is given to the student's background and his particular interests and goals.

Additional requirements include demonstrated proficiency in educational statistics and independent research. Research, culminating in a dissertation, may deal with a problem in the student's science speciality or a problem in science education.

During a student's first or second quarter of enrollment, the department will require a written and/or oral qualifying examination. This examination is designed to assess both the student's fitness to pursue doctoral work and to assist the committee members in planning his doctoral program. A written and/or oral comprehensive examination must be taken at or near the completion of the candidate's course work. Upon acceptance of the dissertation by the candidate's committee and at least four weeks prior to graduation, a final oral examination in defense of the candidate's dissertation will be administered. The Department of Science Education furthermore requires that the candidate's research be acceptable for publication in journals in his field.

In addition to an evaluation of the student's record, tests and examinations are used for diagnostic purposes in planning programs. The Graduate Record Examinations verbal and quantitative scores and the National Teacher Examinations commons and teaching area scores should be submitted with the application for advanced graduate study.

DEPARTMENT OF SPECIAL EDUCATION (SPE – 190)

The Department of Special Education offers a variety of graduate programs leading to master's, specialist's, and doctoral degrees. Additionally, non-majors and experienced teachers may take work leading toward certification, enrichment, and competency in areas of interst.

MASTER'S PROGRAM

This program prepares master teachers and special personnel for a variety of programs. The program may be individualized depending upon one's experience and background. Several plans have been developed for those wishing emphasis in retardation, learning disabilities, emotionally disturbed, gifted, sensory impaired, administration, psychometerics, or general curricula. Information about these programs may be received by contacting the department.

In general, the following courses form a basis for the master's degree programs; foundations and research, 12 hours (RED 601, SPE 709, 701, 694), major areas 9 hours, and cognate and electives to total thirty-six (36) hours minimum as directed by advisers.

SPECIALIST'S PROGRAM

The specialist's degree is granted upon completion of a specifically planned program of study leading to competency in an area of special education. The purpose of this program is to train highly qualified personnel in the education of exceptional children and adults. The student will specialize in either retardation, learning disabilities, emotionally disturbed, visually handicapped, special administration, or curriculum and evaluation. The program consists of a minimum of thirty (30) semester hours in a planned sequence to include the major area, cognates, research, and practicum. A field study (SPE 694) is required.

DOCTORAL PROGRAM

The doctoral program is comprehensive and places emphasis on teacher education, administration, research, and community services. (An internship is required in at least one of the above.) The candidate is expected to develop competency in each of the above areas; and his program will be based upon these as well as his experience, background, and information gathered from written and oral qualifying examinations.

All graduate degree candidates must conform to the entrance and academic requirements listed in Part III and Part IV of this **Bulletin** as indicated by the University and the Graduate School. In addition to the general requirements for admissions to the Graduate School, to be admitted on a regular basis to the department, the candidate must earn a minimum score on the combined aptitude sections of the GRE of 750 for the master's, 800 for the specialist's, and 850 for the doctoral degree. Conditional basis is viewed by individual records according to recommendations, experience, and academic records. Details of special education programs may be secured from the Department of Special Education, Southern Station, Box 115.

SCHOOL OF FINE ARTS

Raymond Mannoni, Dean
E. Richard Prenshaw, Assistant Dean
Jack P. Donovan, Coordinator of Graduate Studies

The School of Fine Arts currently offers graduate degree programs at three levels: master's degree, specialist's degree, and doctoral degree.

Master's Degrees: Master's degrees are offered in the following departments, with majors as indicated:

Department of Art Education
- Master of Art Education

Department of Music
- Master of Music in
  - Applied Music
  - Church Music
  - Conducting
  - Music History and Literature
  - Theory and Composition

Department of Music Education
- Master of Music Education

Department of Theatre Arts
- Master of Fine Arts in Theatre
  - Acting and Directing
  - Designing
- Master of Arts in Theatre Arts

Specialist's Degree: Specialist's degrees are offered in the following department with majors as indicated:

Department of Music Education
- Specialist's Degree in
  - Choral Music Education
  - Elementary Music Education
  - Instrumental Music Education

Doctoral Degrees: Doctoral degrees are offered in the following department, with majors as indicated:

Department of Music Education
- Doctor of Music Education
- Doctor of Philosopy
- Music Eduation

Deficiencies

The School of Fine Arts retains the right to determine deficiencies in the preparation of any graduate student, regardless of the number of course credits accumulated. The School will recommend appropriate means of removing such deficiencies.

Master's Degree Programs

Prescribed curricula for master's degree programs are listed below. As can be seen, they provide some latitude and flexibility in arranging individual degree programs. Course selections must be approved by the student's advisory committee. The student's major professor will assist in every way possible, but final responsibility for following all general departmental regulations lies with the student.

Examinations and Auditions

Examinations for advisory and diagnostic purposes as well as auditions for students who plan to major in applied music are given to all new master's degree students during registration week of each quarter. Entering students should contact the Coordinator of Graduate Studies for information and schedules for these examinations. Approval of the appropriate departmental graduate faculty must be obtained before a student may major in any area of the Fine Arts.

Prospective graduate students in art education must take, during their first quarter of residence, diagnostic examinations in basic art theory and pedagogy. Deficiencies may be removed by passing with a grade no lower than B the non-degree credit course, ARE 600—**Art Education Theory**, and/or taking course work for degree credit as prescribed by the student's individual committee.

Prospective graduate students in music and music education must take, during their first quarter of residence, diagnostic examinations in basic music theory and general music history and literature. Deficiencies may be removed by passing with a grade no lower than B the non-degree credit courses, MUS 720—**Graduate Music Theory** or MUS 730—**Graduate Music History** and/or taking course work for degree credit as prescribed by the student's individual committee.

Students majoring in elementary music or vocal-choral music must demonstrate adequate proficiency in voice and piano. Students majoring in instrumental music must demonstrate proficiency in piano appropriate to previous training and a functional use of the piano in the teaching of instrumental music.

The student's committee will prescribe and approve proficiency levels in all areas for individual students.

Ensemble Participation

All graduate music and music education students are required to participate in at least one ensemble each quarter they are in residence.

Master of Art Education Degree	Hours
Supervision of Art Education Programs	3
Curriculum and Instruction in Art Education	3
Research in Art Education	3
Aesthetics (AA 700 or PHI 557)	3
Advanced Problems in Structure and Pedagogy: 9 hours in one area and six from remaining studio offerings	15
Select one course from: CIF 709 (Social Foundations of Education), CIF 604 (Foundations in American Education), EPY 740 (Advanced Educational Psychology	3
Trends in Current Plastic Expression	3
Thesis	6
Total	39

Master of Music Degree in Applied Music

Undergraduate requirements for a major: (1) completion of a bachelor's degree in music with a major in performance at the University of Southern Mississippi, or (2) completion of any other bachelor's degree in music, provided that the auditioning committee is satisfied that the student is qualified both academically and in performance to pursue the Master of Music degree in applied music at the University of Southern Mississippi. A high level of performance proficiency in the major area is expected. Voice majors must demonstrate adequate knowledge of languages and diction to understand and perform the voice repertory.

Requirements for a major: a minimum of nine (9) semester hours in the major performance area, MUS 715, **Recital,** for two (2) semester hours, and a minimum of four (4) semester hours of representative courses in literature and pedagogy related to the major performance area. Remaining course work must include at least four (4) semester hours in music history and literature, a minimum of four (4) semester hours in music theory beyond the undergraduate requirements, and may include graduate work in appropriate related fields. The total minimum requirement is thirty-four (34) semester hours.

Master of Music Degree in Church Music

Undergraduate requirements for a major: completion of a bachelor's degree with a major in church music from the University of Southern Mississippi or an equivalent program.

Requirements for a major: the program must include MUS 559–**Church Music Colloquium**, three (3) semester hours, MUS 760–**Seminar in the History of Church Music**, three (3) semester hours, MUS 715–**Recital**, one (1) semester hour, and seven (7) semester hours in the major performance area (organ, voice, or graduate conducting). Remaining course work must include a minimum of six (6) semester hours in music theory, six (6) semester hours in music history and literature, and six (6) semester hours in religion electives. The required total is thirty-four (34) semester hours.

Master of Music Degree in Conducting

Undergraduate requirements for a major: completion of a bachelor's degree in music or music education from the University of Southern Mississippi

or an equivalent program. Applicants must demonstrate advanced competency in the major performing area, above average knowledge and ability in all areas of music theory including counterpoint, orchestration, and analysis, practical knowledge of performing techniques on all instruments and voice, and sufficient ability at the piano to play simple scores. Applicants must also have had experience as a member of one or more performing organizations and at least one year of conducting experience.

Requirements for a major: a minimum of fifteen (15) semester hours in vocal and instrumental conducting and cognate fields, such as performance practices, style analysis, score reading, and performance study as approved by the student's committee. Remaining course work must be selected so that each of the following areas is included: (1) Music history and literature, (2) Music theory. Proficiency in one or more languages is recommended. Candidates are expected to prepare and conduct at least one full-length concert with a major performing organization. The required total is thirty-four (34) semester hours.

Master of Music Degree in Music History and Literature

Undergraduate requirements for a major: completion of bachelor's degree in music with a major in music history and literature at the University of Southern Mississippi or an equivalent program. Applicants must demonstrate reading ability in at least one foreign language, preferably German or French.

Requirements for a major: a minimum of nine (9) hours selected from MUS 553, MUS 534, MUS 535, MUS 536, and MUS 537; nine (9) hours in **Seminars in Music Literature** (MUS 761, MUS 762, MUS 763); a minimum of two (2) hours in **Analytical Techniques** or other appropriate music theory courses; a minimum of eight (8) hours selected from MUS 531, MUS 532, MUS 540, MUS 541, MUS 542, MUS 543, MUS 546, MUS 547, MUS 548, MUS 549, MUS 550, and MUS 559; and MUS 698—Thesis, six (6) hours. The minimum total is thirty-four (34) semester hours. **Special Studies** (MUS 792) may be taken for credit in preparation for the thesis: RED 601 and MUS 702 may be required by the student's committee.

Master of Music Degree in Theory and Composition

Undergraduate requirements for a major: completion of a bachelor's degree with a major in music theory and composition at the University of Southern Mississippi or an equivalent program which must have included counterpoint, orchestration, orginal composition, performance study throughout the program, and practical command of the piano.

Requirements for a major: a minimum of six (6) semester hours in advanced composition (APM 691, 693, 694), MUS 714 or MUS 698, MUS 711, MUS 721, MUS 722, and three (3) semester hours in applied music study. The remaining semester hours must include a minimum of six (6) semester hours in music history and literature. The required total is thirty-four (34) semester hours.

Master of Music Education Degree

Undergraduate requirements for a major: completion of an undergraudate degree in teacher education which conforms to NASM requirements.

Thesis Program	Hours
RED 601–Research: Its Introduction and Methodology	3
MUS 702–Bibliography for Music Research	3
MED 725–Foundations and Principles of Music Education	3
MED 726–Research in Music Education	3
MED 698–Thesis	6

The remaining course work must be selected so that each of the following areas is included: (1) music history and literature, (2) music theory, and (3) applied music study. A minimum of fifteen (15) semester hours in music education and cognate fields courses must be included in the total program of thirty-four (34) semester hours.

Non-Thesis Program	Hours
RED 601–Research: Its Introduction and Methodology	3
MED 725–Foundations and Principles of Music Education	3

The remaining course work must be selected so that each of the following areas is included: (1) music history and literature, (2) music theory, and (3) applied music study. A minimum of fifteen (15) semester hours in music education and cognate fields courses must be included in the total program of thirty-four (34) semester hours.

Master of Fine Arts Degree in Theatre Arts

The objective of the Master of Fine Arts curriculum is to develop the educated performer by offering sound theory and intensive practical training simultaneously. Students in the Master of Fine Arts programs will elect a plan of study for specialized acting and directing or designing. A demonstration of performance abilities will be required for admission in this program.

The satisfactory completion of a minimum approved program of forty-six (46) semester hours is required for the Master of Fine Arts degree. Candidates will be required to pass an oral comprehensive examination covering the area of specialization and theatre in general. In addition, the candidate will satisfactorily complete a creative project in his major area of emphasis and defend it orally before the Theatre Arts faculty.

Master of Arts Degree in Theatre Arts

For the Master of Arts degree, the Department of Theatre Arts requires successful completion of thirty-four (34) semester hours including a thesis and its oral defense. Eight (8) of the required thirty-four hours may be chosen from graduate courses in a related field.

Theatre 601 and Theatre 606 are required of all master's candidates. The remainder of the student's degree program will be designed by the graduate committee and the student to accommodate the particular professional interests of the student.

A minimum of eighteen (18) semester hours of undergraduate course work in theatre is required of the prospective graduate student. Students with inadequate preparation may be admitted but will be expected to take undergraduate make-up courses. (See admission and general academic requirements as set forth in Parts III and IV of this **Bulletin.**)

SPECIALIST'S DEGREE PROGRAM

The Departments of Music and Music Education offer graduate courses leading to the specialist's degree in choral, elementary, and instrumental school music areas. General requirements for the specialist's degree are found in Part IV of this **Bulletin**. The degree program satisfies AAA certification for the State of Mississippi, provided the student chooses to do his specialization studies for the degree in the area of his teacher's certificate endorsement. As a sixth year program the specialist's degree presupposes a master's degree in music or music education. The degree program requires regular admission procedures, entrance examinations and auditions during the first full quarter of residence, appointment of a graduate advisory committee, and completion of an approve course of studies designed jointly by the student and his advisory committee. The approved course of studies must be filed with the Coordinator of Graduate Studies prior to the student's second registration for courses.

The specialist's degree requires completion of the approved program of studies containing at least thirty (30) semester hours beyond the master's degree. A minimum of fifteen (15) semester hours of the course work must be chosen in the area of specialty (instrumental music, choral-vocal music, elementary school music) in addition to and beyond such studies in the previously earned master's degree. The remaining course work must be selected so that each of the following areas is included: (1) music history and literature, (2) music theory, and (3) applied music. All graduate music students are required to participate in at least one ensemble each quarter while in residence. The total program may also include related professional study in a cognate field. MED 798-**Research Problem** is required for completion of the degree.

DOCTORAL DEGREE PROGRAMS

Prescribed curricula for doctoral degree programs are listed below. As can be seen, they provide great latitude and flexibility in arranging individual degree programs. Course selections must be approved by the student's advisory committee and major professor. The student's major professor will assist in every way possible, but final responsibility for following all general and departmental regulations lies with the student. Prospective doctoral students must consult with the Coordinator of Graduate Studies prior to initial registration for detailed information about general and departmental regulations.

Department of Music Education

Doctor of Music Education
Doctor of Philosophy in Music Education

The degrees of Doctor of Philosophy in Music Education and Doctor of Music Education are offered to candidates who pursue the course of study with distinction and who show ability to do research and scholarly study. General requirements for the Doctor of Philosophy and Doctor of Education (the Doctor of Music Education general requirements are the same as the Doctor of Education degree) are found in Part IV of this **Bulletin**. The School of Fine Arts further stipulates the following requirements.

Admission: An applicant for admission to doctoral study in music education must possess a master's degree in music education, or its equivalent, from an approved institution. A complete record of previous education and experience and recommendations from responsible persons who are personally acquainted with the applicant and his work are required to support all applications for admission to doctoral study in music education. A personal interview may be required by the School of Fine Arts. Each applicant must have at least three years' successful teaching experience. If the degree work is concerned with college administration, the applicant must have at least three years' experience in a college or university or equivalent.

Research Tools: Candidates for the Doctor of Philosophy degree in music education must comply with the language requirements as specified for Doctor of Philosophy candidates in Part IV of this **Bulletin**. A candidate for the Doctor of Music Education degree is required to demonstrate proficiency in statistics or computer science. At the discretion of the graduate faculty, this candidate may be required to demonstrate a reading knowledge of one modern foreign language.

All doctoral students are required to take RED 601—**Research: Its Introduction and Methodology** (or equivalent), MUS 702—**Bibliography for Music Research** (or equivalent), MED 750—**Music in General Education**, MED 825 and MED 826—**Doctoral Seminars in Music Education**, MED 791—**Research in Music Education**, MED 898—**Dissertation**. The remaining course work will be determined in light of the candidate's qualifying examination, his interests, and the counsel of his major professor and advisory committee. In planning this program, the following minimum distribution of graduate courses (including master's degree work) is required: thirty (30) hours in music education, nine (9) hours in musicology, nine (9) hours in music theory, nine (9) hours in professional education, three (3) hours in applied music and performance study, and the remainder of the program in approved electives. Although Part IV of this **Bulletin** states that seventy-eight (78) semester hours are required for doctoral degrees, it should be clearly understood that some candidates will be unable to receive a degree on the basis of this minimum. The distinction implied by the degree and the traditions related to it require comprehensive knowledge and demonstration of a high degree of proficiency in the major field and related areas of study, as well as the ability to conduct advanced research.

SCHOOL OF HEALTH, PHYSICAL EDUCATION, AND RECREATION

William T. Schmidt, Dean

The School of Health, Physical Education, and Recreation offers the Master of Science, Doctor of Education, and Doctor of Philosophy degrees.

The Master of Science degree is offered in the Department of Health, the Department of Physical Education, and the Department of Recreation. Admission to any one of these programs requires an acceptable score on the Graduate Record Examinations, an acceptable GPA at the baccalaureate level, and a minimum of an undergraduate minor (or its equivalent) in an appropriate field of study.

The Doctor of Education and Doctor of Philosophy degrees are interdisciplinary in nature, requiring the student to concentrate his study in one department of the School, and to demonstrate proficiency in the other two. The minimum course work requirement for each of these degrees is forty-eight (48) semester hours beyond the master's degrees or seventy-eight (78) semester hours beyond the baccalaureate degree. Admission to either of these programs requires a minimum combined (verbal and quantitative) Graduate Record Examinations score of 1,000. Further, since only a limited number of doctoral candidates can be accepted each year, selection is competitive in nature and final selection will be made by a committee of faculty members. Considerations for selection will be based on Graduate Record Examinations scores, academic achievement, and professional achievement.

In order to be granted a graduate degree from the School of Health, Physical Education, and Recreation, a student must have satisfied all of the pertinent requirements for a graduate student as outlined in this catalog.

DEPARTMENT OF HEALTH (HTH – 715)

The Department of Health offers the Master of Science degree with options for concentrated study in health education and safety and driver education. A minimum of thirty (30) semester hours of graduate study is required for this degree.

Master of Science Degree with an Emphasis in Health Education

This degree program is designed to prepare students for teaching health education in colleges and public schools. Course work requirements include: HTH 511, 520, 711, 715, 730, and 745. Students, with the advisement of a

major professor, will elect additional courses to complete the thirty (30) semester hours which are required for the degree. Electives may be selected from psychology, biology, microbiology, education, computer science, guidance, sociology, physical education, and recreation. A student may choose to write and defend a thesis as a part of the degree requirement.

Master of Science Degree with an Emphasis in Safety and Driver Education

This degree program is designed to prepare students for teaching safety and driver education in colleges and public schools. Course work requirements include: HTH 711, 740, 741, 742, 743, 744, and 745. Students, with the advisement of a major professor, will elect additional courses to complete the thirty (30) semester hours which are required for the degree. Electives can be chosen from other course offerings in the Department of Health and from course offerings in related fields of study. A student may choose to write and defend a thesis as a part of the degree requirement.

DEPARTMENT OF PHYSICAL EDUCATION (PE – 730)

The Department of Physical Education offers the Master of Science, Doctor of Education, and Doctor of Philosophy degrees. Options for concentrated study in three areas of specialization are offered in the Master of Science degree program.

Master of Science Degree with a Research–Scientific Emphasis

This program is designed to give students a research and scientific background as preparation for post-master's degree study. Course work requirements include: PE 701, 702, 703, 704, 744, 780, 692, and 698. Students, with the advisement of a major professor, will elect a minimum of six (6) additional hours of course work to complete the thirty (30) hours which are required for the degree. Recommended electives are: HTH 711 and 720; PE 501, 709, and 720; and selected courses in chemistry, biology, and physics. Study of one foreign language is also recommended.

Master of Science Degree with Professional Preparation Emphasis

This program is designed to be a terminal degree program which will prepare students who do not plan to study beyond the master's degree to teach physical education in public schools and small colleges. Course work requirements are: PE 501, 704, 705, 720, 723, 742, 744, and 780. Students, with the advisement of a major professor, will elect either six (6) additional hours of course work or write and defend a thesis to complete the thirty (30) hours which are required for the degree. Recommended electives are: HTH 711 and 720; PE 701, 703, 709, 750, and 692; and AED 634 and 600.

Master of Science Degree with Athletic Administration and Coaching Emphasis

This degree program is designed to prepare students to coach athletes and athletic teams and to administer high school athletic programs. Course work requirements are: PE 704, 705, 722, 723 and 770; and HTH 770. Students with limited knowledge of the physiology of exercise should also schedule PE 701. Students, with the advisement of a major professor, will elect a minimum of twelve (12) semester hours of course work to complete the thirty (30) hours which are required for the degree. Recommended electives are: PE 702, 703, 720, 742, 750, 770, 771, 772, 773, 774, 775, and 780.

DEPARTMENT OF RECREATION (REC – 735)

The Department of Recreation offers a program leading to a Master of Science degree in recreation.

Program Options:

The student may concentrate in any one of four areas of specialization:

1. Community and Municipal Recreation
2. Parks and Recreation Planning
3. Outdoor Recreation and Resource Management
4. Therapeutic Recreation

Departmental Requirements

1. The completion of a minimum of thirty (30) semester hours with fifty percent of these courses at or above the 600 level.

2. The completion of the recreation core: REC 701, 702, 703, 704.

3. A thesis which will confer six semester hours credit within the minimum hourly requirements.

4. Students who have earned a baccalaureate degree in a field other than recreation may be required to complete certain prerequisite courses in pursuit of the master's degree.

5. During the student's last quarter of work, he will submit to comprehensive written and oral examinations. An information sheet regarding comprehensive examinations is available in the Department of Recreation.

SCHOOL OF HOME ECONOMICS

Sarah W. Gibbs, Dean

The Master of Science degree is offered in the Department of Environmental Design, Family Life Services, Food and Nutrition, and Home Economics Education. The general requirements for the Master of Science degree are listed in the front of the **Bulletin**. For detailed information concerning a specific degree program, please refer to that department in the following pages.

DEPARTMENT OF ENVIORMENTAL DESIGN (EVD – 812)

The Department of Environmental Design offers a Master of Science degree in two areas of specialization. These are clothing merchandising and clothing and textiles. Each major requires a minor field and a thesis. Admission to the program requires a minimum GRE score of 750.

Graduate work in both major and minor areas of either specialization must be preceded by undergraduate work in the chosen area. Deficiencies in the student's background may be strengthened by auditing recommended undergraduate courses.

Requirements for the Master of Science degree include a minimum of thirty-six (36) semester hours of graduate credit beyond the bachelor's degree. These must include fifteen (15) hours of clothing and textiles, twelve (12) hours in an approved minor area, three (3) hours of research methods (RED 601), and six (6) hours thesis.

After satisfactory completion of the course work, the student will take a comprehensive oral examination.

DEPARTMENT OF FAMILY LIFE SERVICES (CD – 805) (HHM – 825) (MFL – 830)

The Department of Family Life Services offers programs leading to a Master of Science degree with majors in child development and in family living. Admission to these programs requires a minimum GRE score of 750.

Graduate work in the major and minor fields of specialization must be preceded by course work sufficient to satisfy undergraduate requirements or enough related work to indicate the student's ability to do graduate work in his major and minor fields. Deficiencies in the student's background may be made up by auditing recommended undergraduate courses.

Requirements for the Master of Science degree include: a minimum of thirty-three (33) hours of course work which include RED 601, a thesis or field study, and twelve (12) semester hours in a minor in a related field.

Upon completion of the graduate program, a comprehensive oral examination covering major and minor fields will be required to fulfill the qualifications for a degree.

DEPARTMENT OF FOOD AND NUTRITION (FN – 815)

The Department of Food and Nutrition offers the opportunity to earn the Master of Science degree in institution management. Admission to the program requires a minimum GRE score of 750.

For a master's degree, a minimum of thirty-four (34) graduate hours is required. Eighteen (18) of these hours must be in courses numbered 600 and above. The thirty-four (34) hours include RED 601, a thesis, and twelve (12) hours in a minor field. The candidate has a choice of a thesis or field study. A comprehensive oral examination is required for both.

DEPARTMENT OF HOME ECONOMICS EDUCATION (HEE – 820)

The Department of Home Economics Education offers the Master of Science degree with a major in home economics education. This program is designed primarily for teachers and extension home economists. Admission to the program requires a minimum GRE score of 750.

Requirements are: thirty-six (36) semester hours of course work which include RED 601, CIF 604, a thesis or a field study, and at least nine (9) additional hours in home economics education. The remaining hours may be chosen from the various areas of home economics and other graduate courses by permission of the major professor. Students have an option of a thesis or non-thesis plan. However, those preparing for college teaching or for supervisory positions in home economics are advised to write a thesis.

Those students who are interested in the Cooperative Extension Service may choose a minor in a field outside of home economics in order to meet their needs.

Upon completion of the graduate program a comprehensive oral examination covering major and minor fields will be required to fulfill the qualifications for a degree.

COLLEGE OF LIBERAL ARTS

Claude E. Fike, Dean

The College of Liberal Arts offers the Doctor of Philosophy degree in communication, comparative literature, English, history, political science, and speech and hearing sciences.

The Master of Arts and Master of Science degrees are offered in anthropology, communication, comparative literature, English, foreign languages, linguistics, geography, history, political science, social studies (with several departments cooperating), sociology, and speech and hearing sciences.

With the approval of the major professor and the chairman of the major department, the student may choose a graduate minor from the above listed fields as well as from philosophy and religion and criminal justice. A student in the College of Liberal Arts may also choose a graduate minor in education or psychology from the College of Education and Psychology, or in economics from the School of Business Administration, always subject to the approval of the major professor and the chairman of the major department.

Various departments of the College of Liberal Arts also participate with the College of Education and Psychology in programs leading to the Master of Education degree.

Since the master's degree in social studies is normally intended for teachers, students interested in this degree should consult the Dean of the College of Liberal Arts and the Dean of the College of Education and Psychology, who will jointly arrange suitable degree programs with the appropriate chairmen.

For general academic requirements and regulations governing each of these degree programs, see Part IV of this **Bulletin.**

For **specific** degree requirements of each department, consult the appropriate department in Part V of this **Bulletin.**

CRIMINAL JUSTICE STUDIES (CJ – 281)

The Criminal Justice Program offers a graduate minor requiring twelve (12) semester hours of graduate work. The courses in the program will be found listed in the Course Description Section of this **Bulletin.**

LATIN AMERICAN STUDIES PROGRAM (LASP)

The Latin American Studies Program participates in a Master of Arts and a Master of Science degree in Latin American Studies from several inter-University disciplines with major emphasis in history and political science. For

the Master of Science degree a minimum of thirty (30) or thirty-three (33) graduate semester hours is required as follows:

Master of Arts

I. Bibliography course in either Latin American History or Political Science.
II. Nine hours of graduate courses in Latin American History or Political Science.
III. Twelve hours of graduate courses related to Latin America in any of the following fields: foreign language, geography, sociology, geology, anthropology, economics, history, and political science.
IV. Six hours of thesis.

Master of Science

I. Bibliography course in either Latin American History or Political Science.
II Twelve hours of graduate courses in Latin American History and Political Science.
III. Eighteen hours of graduate courses related to Latin America in any of the following fields: foreign language, geography, sociology, geology, anthropology, economics, history, and political science.

A prerequisite for admission to the master's program is a baccalaureate degree accepted by the Graduate School and by the Latin American Studies Committee (LASC). Students who lack necessary background, such as reading fluency in Spanish or Portuguese, may be accepted, provided they make up these requirements prior to the completion of the program. The LASC may also make other variations which will best meet the individual student's background, needs, and desires while assuring the highest standards for the degree.

DEPARTMENT OF ANTHROPOLOGY (ANT – 286), PHILOSOPHY (PHI – 284), AND RELIGION (REL – 288)

The Department of Anthropology, Philosophy, and Religion offers programs within the College of Liberal Arts leading to the Master of Arts and Master of Science degrees in anthropology. Requirements for these degrees are as follows:

Master of Arts

A minimum of thirty-three (33) semester hours, eighteen (18) of which must be earned in course work at the 600 level or above; acceptable proficiency in one foreign language; and completion of an approved thesis. An outside minor of twelve (12) semester hours in approved related field may be included toward the total hours required.

Master of Science

A minimum of thirty-three (33) semester hours, eighteen (18) of which must be earned in course work at the 600 level or above; acceptable proficiency in statistics; and completion of an approved thesis. An outside minor of twelve (12) semester hours in an approved related field may be included toward the total hours required.

DEPARTMENT OF COMMUNICATION (COM – 208)

The Department of Communication offers the Master of Arts, the Master of Science, and the Doctor of Philosophy degrees.

Students in the master's degree programs may focus in either of two graduate areas: public address or communication. Public address is essentially directed toward a teaching career, and should include course work from other areas of the department. The communication focus is designed for careers in public relations or other mass media related fields, and should emphasize courses in mass communication.

Students who choose to focus their work in mass communication are expected to have prior undergraduate and/or professional media training. Those not meeting this requirement can be admitted to regular status after having made up deficiencies as determined by the student's graduate advisory committee.

The Doctor of Philosophy offered by the department is an inter- disciplinary communication program. The doctoral student takes courses in various areas of mass communication and interpersonal communication, but has the opportunity to select one area as the field of primary concentration. Note the graduate courses listed separately in Part Six under public address, journalism, and radio-television-film, as well as the communication course descriptions. Additional work will be required for those focusing their work in mass communication who do not have sufficient academic or professional media training. Specific requirements are determined by the student's graduate advisory committee.

Requirements for these degrees are:

Master of Arts. A minimum of thirty-three (33) semester hours.

Master of Science. Either a thesis or non-thesis plan may be elected, subject to approval of the major professor and the department chairman. Students intending to pursue a degree higher than the master's are encouraged to write a thesis.

The thesis plan is essentially the same as the Master of Arts except that a foreign language is not required. The non-thesis plan requires a minimum of thirty-three (33) semester hours of course work, at least twenty-two (22) of which must be in courses numbered 600 and above.

Students who seek the master's degree with a thesis requirement are given an oral comprehensive examination in the major field and are required to give an oral defense of the thesis. A written comprehensive examination is given to all graduate students pursuing the non-thesis program.

An outside minor of twelve (12) semester hours in a suitable related field may be included in the total hours required for either master's degree.

Doctor of Philosophy. The minimum course credit hour requirement for the doctoral degree is forty-eight (48) semester hours beyond the master's degree or seventy-eight (78) semester hours beyond the baccalaureate. The candidate will select one area as the field of primary concentration. A suitable dissertation, approved by his advisory committee, will be submitted in his field of major emphasis.

Doctoral candidates must elect an outside minor of twelve (12) semester hours to be approved by the major professor and the graduate faculty.

The student should consult Part IV of this **Bulletin** for general academic requirements.

DEPARTMENT OF ENGLISH (ENG – 224)

The Department of English offers programs leading to the Doctor of Philosophy, Master of Philosophy, Master of Arts, and Master of Science degrees. The Master of Philosophy degree is particularly well suited to satisfying the Class AAA certificate. The student must maintain an overall B average in all graduate work.

General academic requirements for all graduate degrees are set forth in Part IV of this **Bulletin**. Specific departmental requirements for each degree are stated in information sheets obtainable at the English Office, College Hall 210. See also Master of Arts and Doctor of Philosophy degrees in comparative literature.

DEPARTMENT OF FOREIGN LANGUAGES

Candidates may study toward the attainment of either the Master of Arts or the Master of Science degree in French, German, or Spanish. Applicants for admission to the graduate program in this department should be able to demonstrate advanced undergraduate knowledge of an appropriate foreign language. Those intending to emphasize literature should have already engaged in systematic study of the literature of some linguistic area. Each degree program requires at least thirty (30) hours of graduate credit, eighteen (18) of which must be numbered 600 or above. If a minor is elected, it consists of twelve (12) hours of course work. Courses to be counted toward a major are drawn from the student's chosen language area; or, with concurrence of the student's adviser, the courses may be drawn from the group listed as Foreign Languages (FL). On special advisement, courses in comparative literature may be counted toward the major.

The Master of Arts degree specifically requires proficiency in a second foreign language and the satisfactory completion of a thesis. No minor is necessary. The Master of Science degree requires a minor, but no thesis and no second foreign language.

CURRICULUM IN COMPARATIVE LITERATURE

The curriculum in comparative literature offers programs of study leading to the Master of Arts and the Doctor of Philosophy degrees. Students commencing work in the Master of Arts program should have knowledge of two languages, one which may be English. During the course of study, proficiency in foreign languages and minor areas will be increased; therefore, it is not expected that beginning students be expert in all facets of their proposed curricula. Graduate work beyond the master's level requires knowledge of at least three languages, one of which must be English. The aim of the curriculum is to prepare students to deal intelligently and originally with any literary document and with any problem related to belles lettres.

Requirements for the Master of Arts degree include successful completion of the following:

1. Thirty-three (33) hours graduate credit, eighteen (18) of which are numbered 600 or above, to include:
   a. Twelve (12) hours in the literature of one language, ancient or modern, including English.
   b. Six (6) hours of thesis. (Exceptions to this requirement, may, under certain circumstances, be approved by the Director of the Curriculum.)
   c. Fifteen (15) hours in comparative literature and in approved related disciplines (e.g., the literature of another language, art, music, philosophy, history, linguistics, and others with special approval.)
2. An examination covering the student's specific course of study.

Requirements for the Doctor of Philosophy degree include successful completion of the following:

1. Seventy-eight (78) hours of graduate credit beyond the bachelor's degree, to include approximately the following courses:
   a. Thirty (30) hours in the literature of one language.
   b. Either eighteen (18) hours in the literature of a second language or nine (9) hours in the second language and nine (9) in an approved related discipline.
   c. Nine (9) hours in comparative literature.
   d. Nine (9) hours in the literature of a third language.
   e. Twelve (12) hours of electives. (One of items a., b., d., and e. should complement each other so as to establish a specialization for the student.)
2. A comprehensive examination covering the history of one literature, the methods of comparative literature, and the student's area of specialization.
3. A dissertation and a final defense of the dissertation.

DEPARTMENT OF GEOGRAPHY (GHY – 268)

The Department of Geography offers programs leading to both the Master of Arts and the Master of Science degrees.

The career-oriented concentrations are available in resource management and watershed planning, urban and rural land use, population/human resources, and cultural systems, plus other staff specialities in a variety of topical and regional areas. All students will be expected to develop a primary interest in one of the preceding topical fields or another specialization within either physical or economic geography.

MASTER'S PROGRAMS

All students are expected to complete the following requirements:

1. Departmental Diagnostic Examination–to be taken during the student's first quarter of enrollment in the program–as scheduled by the department.
2. A minimum of thirty-six (36) semester hours in graduate-level geography courses with at least eighteen (18) hours of work in courses at the 600 level. With the approval of the major professor, the student may optionally take (outside the department) up to twelve (12) semester hours of cognate courses within the minimum hourly requirements.
3. Demonstrated proficiency in cartography, quantitative methods, and one other techniques course in geography. Proficiency is generally established by evidence of satisfactory completion of course work emphasizing these techniques sometime in the student's academic career, at either the graduate or undergraduate level. Geography 411 (511), 412 (512), 413 (513), 414 (514), or 416 (516) may be used to satisfy the "other techniques" requirement.
4. A thesis, which will confer six (6) semester hours credit within the minimum hourly requirements.
5. An oral examination on the student's academic program and an oral defense of the thesis must be satisfactorily completed before the degree is awarded.

In addition to the above, the following requirements are specified for those students working respectively for either the Master of Arts or the Master of Science degree in geography (credit hours taken in satisfaction of either requirement cited below may not be applied toward the minimum requirements for the degree):

Master of Arts

A reading knowledge of one approved foreign language*

Master of Science

Demonstrated proficiency in statistics or in a computer-programming language suitable to the degree program and research needs of the candidate.**

*Proficiency in a foreign language may be established either by (1) completion of nine (9) semester hours of an approved foreign language with a grade of **C** or better or (2) by satisfactorily passing the Princeton Examination in that language. Transfer credit will be evaluated on an individual basis.

Proficiency in statistics may be established either by examination or by satisfactorily completing the prescribed USM two-course sequence, CSS 515 and 516, with a grade of **C or better. Proficiency in a specific computer language will be certified by an examination in that language devised and administered by the Department of Computer Science and Statistics.

DEPARTMENT OF HISTORY (HIS – 272)

The Department of History participates in programs leading to the degree of Master of Arts, Master of Science, Master of Philosophy, and Doctor of Philosophy.

General Regulations:

The student is held responsible for following all graduate regulations. The student's major professor will help in any way possible, but the student is expected to know what is required and to take full responsibility. The procedure is explained fully in Part IV of this **Bulletin.**

MASTER'S PROGRAMS

Admission Requirements:

See pages of this **Bulletin** for general requirements which are the same as those required by the Graduate School.

Master of Arts

All students are expected to complete the following requirements:

1. A total of thirty (30) semester hours in history with fifty percent of work in courses numbered above 600.
2. History 710 and 740 (depending on his major field) at its first offering by the department.
3. A reading knowledge of one foreign language.
4. With the approval of the major professor the student may take a nine (9) hour minor within the minimum hourly requirements.
5. A thesis, which will confer six hours credit within the minimum hourly requirements.
6. After satisfactory completion of the course work and the thesis, the student will take a comprehensive oral examination, which will be given at stated times throughout the year, usually during the seventh week of a quarter. An information sheet regarding comprehensive examinations is available in the Department of History.

Master of Science

All students are expected to complete the following requirements:

1. A total of thirty-three (33) semester hours with fifty percent of work in courses numbered above 600.
2. An outside minor of nine (9) hours within the minimum hourly total of thirty-three (33) semester hours. With the approval of the candidate's committee, this outside minor may be waived for students who write a thesis.
3. History 710 or 740 (depending on his major field) at its first offering by the department.
4. A thesis (optional).
5. After satisfactorily completion of the course work, the student will take a comprehensive oral examination, which will be given at stated times throughout the year, usually during the seventh week of a quarter. Comprehensive examination must be arranged when the candidate's major professor is present. An information sheet concerning comprehensive examinations is available in the Department of History.

Fields:

The Department of History presently offers the following fields for the Master of Arts and the Master of Science degrees:

1. U.S. History to 1789
2. U.S. History, 1789-1848
3. U.S. History, 1848-1900
4. U.S. in the 20th Century
5. Medieval History
6. Latin America
7. Russia to 1917
8. Russia Since 1917
9. Britain, 1485-1760
10. Britain, 1760-Present
11. Europe, 1789-1870
12. Europe, 1815-1919
13. Europe, 1919-Present
14. A specialized field which might include the Far East, the Middle East, Africa, etc.

The Master of Arts candidate must demonstrate proficiency in the field of his thesis, plus one field in U.S. history and one in a non-U.S. field.

The Master of Science degree requires proficiency in three fields of history and the outside minor. The history fields offered must include at least one U.S. and one non-U.S. field.

MASTER OF PHILOSOPHY DEGREE

Admission Requirements:

The department requires of all entering students a minimum grade point average of 3.25 on all graduate work and a combined score of 850 on the aptitude phase of the Graduate Record Examinations.

All students are expected to complete the following requirements:

1. A minimum of thirty (30) hours of work beyond the master's degree or sixty (60) hours beyond the bachelor's degree, with fifty percent of the work in courses numbered 600. With departmental permission a related minor of nine hours can be elected.
2. Proficiency in a foreign language is required unless the student's master's program included such a requirement and provided that the language proficiency was demonstrated within four years of the student's admission to the Master of Philosophy program.
3. A thesis of six hours credit.
4. One quarter of full-time work on the Hattiesburg campus constitutes residence requirements for the degree.
5. A departmental qualifying examination, a written and oral comprehensive examination, and a final oral examination of the thesis are required.

The department offers the Master of Philosophy degree in U.S. History and in European History Since 1789. If a candidate seeks the degree in U.S. History he must demonstrate proficiency in either American History to 1877 or American History Since 1865. In addition he must demonstrate proficiency in either Europe 1789-1870, Europe 1870-1919, or Europe 1919 to the Present. He must also demonstrate proficiency in one of the following fields: Medieval, Latin America, Britain 1485-1760, or Britain 1760 to the Present, or one of the three European fields not selected above.

If a candidate majors in the field of European History he must demonstrate proficiency in European History from 1789 to 1914 or Europe 1870 to Present. In addition he must demonstrate proficiency in one of the following fields: Medieval, Latin America, Britain 1485–1760, Britain 1760 to Present.

DOCTORAL PROGRAM

Admission Requirement

The department requires a minimum grade point average of 3.5 on all graduate work and a combined score of 900 on the aptitude phase of the Graduate Record Examinations. Exceptions to these requirements may be made of those students who have received Master of Arts degrees from the University of Southern Mississippi, provided they received a GRE score of 800, a unanimous recommendation by their Master of Arts committees, and approval by a majority of the members of this department. Students so accepted will be classified " conditional," which status is removed by achieving a 3.5 average in eighteen (18) hours work during the first two quarters.

A minimum of seventy-eight (78) hours of course credit beyond the baccalaureate degree, which includes a minimum of three research seminars—two in the field of the major and one in the departmental minor—and History 710 and 740 must be attained by all students.

Major and Minor Requirements:

The department offers the Doctor of Philosophy degree in U. S. History and in European History Since 1789. If a candidate seeks a doctorate in U. S. History, he must demonstrate proficiency in all of American History. In addition he must demonstrate proficiency in either European History from 1789-1870 or European History from 1870 to Present. He must also demonstrate proficiency in one of the following fields: Medieval, Latin American, British History 1485-1760, or British History 1760 to Present, one of the European fields not selected above, or a specialized field such as Russian History with the consent of the major professor and the graduate committee. He is required also to develop an outside minor in one of the social sciences or humanities in which he will take twelve (12) semester hours of work.

If a candidate majors in the field of European History, he must major in the period of Europe Since 1789. He must demonstrate proficiency in either American History to 1865 or American History Since 1865. He is also required to demonstrate proficiency in one of the following fields: Medieval, Latin American, Britain 1485-1760 or Britain, 1760 to Present, or a specialized field such as Russian History with the consent of the major professor and graduate committee. In addition, he must establish an outside minor or twelve (12) semester hours in any one of the fields of social sciences or humanities. The outside minor in either case should be decided after consultation with the candidate's major professor and his graduate committee.

Language Requirement

Each prospective candidate for the doctoral degree must demonstrate proficiency in French and in German during his period of residence for the Doctor of Philosophy degree. Upon the recommendation of the major professor and the approval of the graduate committee, some other language may be substituted for either French or German. The first language must be completed before the start of the second year of graduate study, and the second language in the semester before the general comprehensive examinations are taken.

Doctoral Committee:

An information sheet regarding the appointment of a doctoral committee and doctoral examinations is available in the Department of History.

Dissertation

A dissertation is expected to be a mature and competent peice of writing, embodying the results of significant and original research on a subject chosen by the candidate and approved by the major professor and the graduate committee.

Upon completion and approval of the dissertation, the candidate is expected to stand satisfactorily a final examination on the dissertation and the field in which the dissertation lies.

DEPARTMENT OF POLITICAL SCIENCE (PS – 280)

MASTER'S DEGREE PROGRAM

Master of Arts. Requirements for the Master of Arts degree include: thirty (30) semester hours of course work, which include a thesis, and a twelve (12) hour minor (optional). A reading knowledge of one foreign language is also required.

Master of Science. Requirements for the Master of Science degree include: thirty-three (33) semester hours of course work, including an outside minor of twelve (12) hours. A thesis is optional. The Master of Science degree should be considered a terminal degree.

Course Requirements in the Major. Graduate students who expect to receive the Master of Arts degree will select three fields in political science in which to concentrate their course work, Political Theory being one of the three. Graduate students who expect to receive the Master of Science degree will, in addition, select an outside minor, with the advice and consent of their committee.

The fields of political science and the courses in each field are:

Political Theory and Methodology
520, 521, 525, 720, 721, 723

American Government Politics
501, 502, 504, 506, 507, 508, 509, 700

International Relations
531, 532, 534, 535, 730, 731

Comparative Government and Politics
550, 551, 552, 553, 554, 555, 556, 558, 750, 751

Public Administration
570, 571, 572, 573, 770

Public Law
580, 581, 582, 585, 781

Comprehensive Examination. A written and oral comprehensive examination will be given at or near the end of the course work on the three fields of concentration and on the minor, if applicable.

Courses Accepted from Other Departments. The following courses will be accepted as political science for purposes of completing a major or minor if approve by the student's adviser:

ECO 501; HIS 512, 544, 545, 546

DOCTORAL PROGRAM

In addition to the general requirements listed above in this **Bulletin**, the Department of Political Science makes the following specific requirements.

Proficiency in two foreign languages is expected. The student must be able to use the first language before beginning doctoral work (the second year of graduate study), and must satisfy the requirement for the second language at least one full quarter prior to the quarter in which the comprehensive examination is taken. A dissertation based on scholarly research in original sources is required.

The qualifying examination is to be taken during the first quarter of graduate work beyond the master's degree.

Course Requirements in the Major. Doctoral candidates must specialize in four fields of political science and one outside minor. (The fields and courses are listed under the master's program above.)

Comprehensive Examination. At the end of the course work, and following successful completion of the foreign language requirement, a written and oral comprehensive examination will be taken in the four fields of the major, and, at the student's doctoral committee's discretion, in the minor. Should the student fail the comprehensive examination in one or more fields a re-examination may be given by the department following a lapse of two quarters, or when the student has taken sufficient remedial work to warrant re-examination. Should the student fail the second examination, he will not normally be allowed to continue graduate work in the department.

DEPARTMENT OF SOCIOLOGY (SOC – 292)

The Department of Sociology's graduate program provides for the Master of Arts degree in sociology and a sociology minor in the master's and doctor's degree programs of other departments.

General regulations governing admission to the Graduate School, requirements of the College of Liberal Arts, and requirements for admission to candidacy for degree are to be found elsewhere in this **Bulletin**. The graduate student should familiarize himself with these requirements and assume responsibility for their discharge.

The major professor and departmental chairman will work out a program of study with each student electing to do graduate work in sociology.

If the student is uncertain as to whether he has satisfied undergraduate course prerequisites for any particular course, he should consult the instructor for clarification.

THE MASTER OF ARTS PROGRAM

In the major area, the Department of Sociology offers only the Master of Arts degree. General requirements correspond to the requirements of the University and its Graduate School. Policies of admission to the University, admission to the Graduate School, admission to candidacy for degree, and grading standards conform to those laid down by the University.

THE MASTER OF ARTS DEGREE

Twenty-four (24) semester hours in sociology (including six [6] hours of thesis credit.)

Twelve (12) semester hours in a minor subject approved by the Sociology Department.

At least half of the hours must be in courses numbered 600 or above.

Reading knowledge of one foreign language (proficiency as determined by Graduate School policy).

A thesis to be approved by the major professor.

A written comprehensive examination.

An oral examination by the student's committee to be based on the thesis, the major, and the minor.

DEPARTMENT OF SPEECH AND HEARING SCIENCES (SHS - 296)

The Department of Speech and Hearing Sciences participates in programs leading to the Master of Arts, Master of Science, and Doctor of Philosophy degrees. Part IV of this **Bulletin** covers the specific requirements for these degrees. At the master's level, specialization is possible in two principals areas: (1) speech/language pathology and (2) audiology. The program of study at the doctoral level is planned with specialization in one of three principal areas: (1) speech/language pathology, (2) audiology, and (3) speech and hearing sciences.

MASTER'S PROGRAM

Master's Degree Requirements

Potential graduate students should refer to other sections of the **Bulletin** for information regarding admission requirements as set forth by the Graduate School and the College of Liberal Arts, and for admission to candidacy for a degree. The master's degree in speech/language pathology or audiology is a clinical degree designed to meet the academic and clinical practicum requirements for the Certificate of Clinical Competence awarded by the American

Speech and Hearing Association. Unless arrangements are made in advance with the department faculty, all master's degree candidates must pursue a program meeting the academic and clinical practicum requirements in either speech pathology or audiology for the CErtificate of Clinical Competence.

The master's degree requires a minimum of thirty-four (34) semester hours.

DOCTORAL PROGRAM

Doctoral Degree Requirements

Potential doctoral students will be advised individually by the department faculty. Such students are urged to become familiar with the portions of the **Bulletin** which deal with doctoral requirements.

COLLEGE OF SCIENCE AND TECHNOLOGY

Shelby F. Thames, Dean
William G. Brundage, Assistant to the Dean
George F. Pessoney, Research Coordinator

The College of Science and Technology offers the Doctor of Philosophy degree in biology, chemistry, microbiology, polymer science, and science education.

The Master of Arts degree is offered in the Departments of Biology, Chemistry, Geology, and Science Education, and the Master of Science degree is offered in these departments plus the Departments of Microbiology, Physics, Polymer Science, Mathematics, Medical Technology, and the Food Science and Technology Program.

The Departments of Biology, Geology, Mathematics, and Science Education, in cooperation with the College of Education and Psychology, offer programs leading to the Master of Education degree.

The Doctor of Education degree is offered in cooperation with the College of Education and Psychology by the Departments of Mathematics and Science Education.

Environmental Science courses are so constructed as to provide a minor for a master's or doctoral degree program.

For detailed information concerning a department's specified degree program please refer to that department in the following pages. The student's attention is also directed to Part IV of this **Bulletin** for general Graduate School requirements and regulations.

FOOD SCIENCE AND TECHNOLOGY (FST – 396)

Master of Science Degree

Admission Requirements:

The applicant must hold a baccalaureate degree from an accredited college or university. In addition to the entrance requirements set forth by the Graduate School of the University of Southern Mississippi, the applicant must obtain a combined score of 800 or above on the aptitude sections of the Graduate Records Examinations. It is desirable, but not essential, that the student have prior training in food science. He should, however, be well trained in biology, chemistry, microbiology, and biochemistry.

Master's Degree Program:

The Food Science and Technology Program will require a qualifying examination to be taken during the first quarter upon entering Graduate School. The results of this examination and the student's transcript will be evaluated by the student's committee, in consultation with the student, to determine the number of courses needed for graduation. A minimum of thirty (30) graduate hours is required, twelve (12) of which must be in administration, biochemistry, chemistry, marketing, microbiology, nutrition, or physiology. An acceptable problem in research must be completed and terminated by a written and/or oral comprehensive examination.

Graduate Courses in Food Science:	Hours
Food Enzymes	3
Food Toxicology	4
Synthetic Foods	4
Food Science Seminar	3
Food Technology Seminar	3
Research	1-6
Thesis	6

DEPARTMENT OF BIOLOGY (BIO – 305)

MASTER'S DEGREE PROGRAMS

The Department of Biology participates in programs leading to the Master of Arts, Master of Science, and Master of Education degrees in biology. For these degrees a minimum of thirty (30) graduate hours is required, twelve (12) of which should be in minor area determined by the chairman of the department or the student's major professor. Eighteen (18) of these hours must be from courses numbered above 500. An acceptable problem in research must be completed by both a written thesis and an oral examination defending the thesis. Within the department the student may study biology, zoology, botany, and, in conjunction with the Gulf Coast Research Laboratory, marine biology.

The general requirements for the Master of Arts and the Master of Science degrees are found in Part IV of this **Bulletin**.

DOCTORAL PROGRAMS

The Department of Biology offers the Doctor of Philosophy degree with majors in biology, botany, zoology, and, in conjunction with the Gulf Coast Research Laboratory, marine biology. The degree of Doctor of Philosophy is conferred only in recognition of excellence in research and scholarship.

Work at the Gulf Coast Research Laboratory is recognized as resident work.

DEPARTMENT OF CHEMISTRY (CHE - 320)

MASTER'S DEGREE PROGRAMS

The Department of Chemistry participates in programs leading to the Master of Arts and the Master of Science degrees. For all master's degrees a minimum of thirty (30) graduate hours is required.

Th department has the same requirements for the Master of Arts and Master of Science degrees, so the title of the degree is optional with the student. These degrees require proficiency in a language, knowledge of computers, and major courses selected by the student in consultation with a graduate faculty committee chaired by the major professor. The department will require a qualifying examination to be taken by the student during the first week upon his entrance to the Graduate School. The results of this examination will be used to determine any deficiencies which must be removed. The student will also be required to attend seminars each quarter of residence. The candidate must successfully pass a comprehensive examination in his major area which will be administered to him approximately six months before his graduation. An acceptable problem in research must be completed and terminated by a thesis and an oral examination defending the thesis.

DOCTOR OF PHILOSOPHY PROGRAM

The Department of Chemistry feels that the degree of Doctor of Philosophy is not to be conferred because of the successful completion of a pre-determined number of credit hours but only in recognition of excellence in research and scholastic attainment, However, the University requires a minimum of seventy-eight (78) hours beyond the bachelor's or forty-eight (48) beyond the master's degree.

The departmental requirements for the Doctor of Philosophy degree are those stated under the general requirements in this **Bulletin** plus the following:

1. The Department of Chemistry is offering majors in the fields of analytical, biochemistry, inorganic, organic, and physical chemistry.
2. A student, with faculty consent, may choose to bypass the master's degree as he proceeds toward the doctoral degree.
3. The course work required will be determined by the student and the graduate committee. The choice of the field of study shall rest with the student as shall the choice of the major professor after consultation of the student with each member of the graduate faculty.
4. One year of residence time will be allowed for the time spent in obtaining the master's degree if it is transferred from another school. Residence time is based on full-time study as determined by the department. Only under exceptional circumstances will a student be permitted to do any of the last two years of residence at another location. The dissertation shall be presented to the major professor for correction and criticism before the end of the quarter preceding

the quarter of graduation. After approval by the major professor the candidate will circulate copies of the dissertation to his doctoral committee for correction and criticism. After the committee's approval the oral examination will be scheduled by the chairman of the doctoral committee consistent with University policy.

DEPARTMENT OF COMPUTER SCIENCE AND STATISTICS (CSS - 330)

The Department of Computer Science and Statistics participates in the program leading to a minor in statistics at the master's level. For a minor, the student must take twelve (12) semester hours which should be selected from the following courses:

	Hours
CSS 515—Methods of Mathematical Statistics I	3
CSS 516—Methods of Mathematical Statistics II	3
CSS 517—Experimental Design	3
CSS 518—Sampling Methods	3
CSS 635—Probability Theory	3
CSS 636—Statistical Inference	3
CSS 637—Least Squares Techniques	3

Students may take the following courses in the Department of Psychology and apply them to a minor in statistics:

PSY 762—Research Methods: Descriptive Statistical Methods	3
PSY 763—Research Methods: Significance Tests and Experimental Designs	3
PSY 764—Factor Analysis	3

Doctoral candidates may take nine (9) semester hours in either statistics or computer science in lieu of a second language. Specific courses will be determined by this department and by the student's graduate committee.

DEPARTMENT OF GEOLOGY (GLY – 340)

The Department of Geology participates in programs leading to the Master of Arts and the Master of Science degrees in geology. For all master's degrees, a minimum of thirty (30) graduate hours is required, fifteen (15) of which must be in courses numbered above 600. For the Master of Arts or the Master of Science, the student must complete an original research program, submit and defend a thesis to the department; a thesis committee which supervises these activities is established when the student is formally admitted to a degree candidacy. The score on the advanced subject (in the area of science) on the Graduate Record Examinations must be submitted prior to enrollment; no student will be admitted to candidacy for the master's degree in geology who has a score of less than 1000 on the combined total of aptitude sections of the Graduate Record Examinations.

Students following programs leading to the Master of Arts or the Master of Science degree in geology will be required to take a summer field course if they did not have such a course as undergraduates (this stipulation may be waived, upon application, on account of physical disability).

For the Master of Arts and the Master of Science degrees the student must take a minor of nine (9) hours in a field approved by his committee; for the Master of Arts degree, he must also demonstrate a reading knowledge of a language pertinent to the subject of his thesis.

The department has a cooperative arrangement with the Gulf Coast Research Laboratory at Ocean Springs, Mississippi. Courses in marine geological studies may be taken at the Laboratory and are generally taught in the summer.

DEPARTMENT OF MATHEMATICS (MAT – 350)

The Department of Mathematics offers programs leading to the Master of Arts, Master of Science, and Master of Philosophy degrees with a major in mathematics. In cooperation with the College of Education and Psychology, the Master of Education and the Doctor of Education degrees are offered.

For all master's degrees, a minimum of thirty (30) semester hours of graduate work is required, eighteen (18) semester hours of which must be in courses numbered above 600. At least fifteen (15) hours of the courses numbered above 600 must be in mathematics. A student who is a resident for less than three (3) quarters must complete a minimum of eighteen (18) semester hours of mathematics courses numbered above 600.

For the Master of Science degree, proficiency in a foreign language is not required. The writing of a thesis is optional with the student's advisory committee.

Before completing nine (9) hours of graduate work the student, with the help of his adviser, should outline his tentative graduate program. As a guide to the student, the courses are grouped into four areas: algebra, analysis, applied mathematics, and topology. The student, with the help of his adviser, should obtain a suitable balance in at least three of the four areas. Details on the courses that will satisfy this requirement may be obtained from the departmental office.

A mathematics seminar is conducted each quarter for graduate students in mathematics. Its purpose is to contribute to the student's mathematical development. Each graduate student is required to attend the mathematics seminar each quarter in residence for a total of four (4) semester hours or until he graduates. A maximum of six (6) semester hours credit may be earned for participation in the seminar.

The three-quarter sequence in advanced calculus should be completed before beginning the programs leading to the Master of Arts or Master of Science degree. If not, then it must be included as a part of the program approved by the student's adviser. Only the third course in this sequence can be included as part of the thirty (30) hour minimum requirement for a master's degree.

A student must satisfy the present undergraduate requirements for a major in mathematics at the University of Southern Mississippi before beginning a program leading to a master's degree in mathematics. If a student cannot meet these requirements, he may be admitted to the Graduate School as a conditional graduate student and allowed to take work to fulfill these requirements. The hours required for a graduate degree will be in addition to this prerequisite. It should be emphasized that admission to the Graduate School does not imply acceptance of the student as a candidate for a graduate degree.

Graduate students in mathematics are required to pass an oral preliminary examination before being admitted to candidacy for a master's degree. The preliminary examination will cover fundamentals and will serve to identify the student's level of mathematical maturity. No student will be granted more than three attempts to pass the preliminary examination with at least a three-month interval between attempts. This examination will be administered not later than the fourth week of any quarter on a date arranged by the student with the student's adviser and the chairman of the Mathematics Department. A minimum of fifteen (15) semester hours of graduate courses must be registered for and completed after the examination is passed.

Candidates for either the Master of Arts or the Master of Science degree will take an oral comprehensive examination not later than the seventh week of the last quarter of residence on a date arranged by the student with the student's adviser and the chairman of the Department of Mathematics.

No student will be permitted to select a thesis topic until he has been admitted to candidacy for a master's degree. The thesis in mathematics must conform to University regulations. Four copies of the candidate's thesis are required to be distributed as follows: two copies to the Dean of the Graduate School, one copy to the chairman of the Department of Mathematics, and one copy to the student's major professor.

DEPARTMENT OF MEDICAL TECHNOLOGY (MTC – 354)

Admission

The applicant must hold a baccalaureate degree from an accredited college or university, and certification by the Board of Registry, American Society of Clinical Pathologists. In addition to the entrance requirements set forth by the Graduate School of the University of Southern Mississippi, the applicant must obtain a combined score of 800 or above on the aptitude sections of the Graduate Record Examinations. This examination may be taken after the student has enrolled in the program. The Department of Medical Technology endeavors to prepare students for positions as either education coordinators or as chief technologists in medical technology.

MASTER'S DEGREE PROGRAM

Students entering the program will be given the option of writing a thesis or of taking nine (9) hours of graduate course work beyond a basic thirty-six (36) hour course requirement. The latter option will be made by those students who do not wish to pursue a degree beyond the Master of Science. Those students who choose to write a thesis will, in addition to completing the thirty-six (36) hours of basic course work, choose a clincially oriented problem which meets the approval of a staff pathologist.

Pre-Service Teaching. A pre-service teaching experience will be part of the required activities for the program. Students will assume responsibility for various phases of instruction to fourth year medical technology students enrolled in the undergraduate program at the University. This phase of instruction will be carefully supervised by the department chairman and the education coordinator.

Internship. Upon successful completion of all course work, the student will be assigned to a clinical facility for his internship requirement. He will serve as assistant education coordinator or assistant chief technologist, and, where applicable, complete his research. While at the hospital, the student will be under the direct supervision of the director of laboratories and the education coordinator of the hospital.

Master of Science Degree in Medical Technology

The following is a list of the courses required of all candidates:

	Hours
CHE 622–General Biochemistry I	3
CHE 623–General Biochemistry II	3
CHE 624–General Biochemistry III	3
CHE 541–Applications of Nuclear Techniques	3
MIC 742–Principles of Immunochemistry	3
MIC 743–Immunohematology	3
GEN 731–Cytogenetics	3
CIF 607–Basic Course in Curriculum Development	3
EPY 740–Advanced Education Psychology	3
CIF 619–Utilization, Selection, and Preparation of Audiovisual Materials	3
CIF 632–Measuring Results in Education	3
MGT 625–Human Relations in Business	3

DEPARTMENT OF MICROBIOLOGY (MIC – 310)

Any student having successfully completed a Bachelor of Science or Bachelor of Arts degree in any of the biological or physical sciences, who demonstrates a minimum score of 900 on the aptitude section of the Graduate Record Examinations, who has a grade point average of at least 3.0 in the physical or biological sciences, and who meets the requirements set forth by the Graduate School of the University of Southern Mississippi is eligible to pursue a

program leading toward the Master of Science or the Doctor of Philosophy degree in the Department of Microbiology. The Department of Microbiology endeavors to prepare students for teaching and/or research positions in industrial and medical microbiology and in genetics.

MASTER'S DEGREE PROGRAM

The Department of Microbiology will require a qualifying examination to be taken during the first week upon entering Graduate School. The results of this examination will be used to determine any deficiencies the student may possess which will be required to be removed. A minimum of thirty (30) graduate hours is required, twelve (12) of which must be in an approved minor area of science. An acceptable problem in research must be completed and terminated by a written and/or oral comprehensive examination.

DOCTOR OF PHILOSOPHY PROGRAM

The Doctor of Philosophy degree in the Department of Microbiology is considered foremost to be a research degree; however, a student must demonstrate excellence in scholastic attainments as well as research capabilities. The University requires a minimum of seventy-eight (78) hours beyond the bachelor's or forty-eight (48) hours beyond the master's degree. The Department of Microbiology requires one foreign language and proficiency in statistics as set forth by the Graduate Council.

During a student's first or second quarter of enrollment, the department will require a written an/or oral qualifying examination. This examination is designed to assess both the student's fitness to pursue doctoral work and to assist the committee members in planning his doctoral program. A written and/or oral comprehensive examination must be taken at or near completion of the candidate's course work. Upon acceptance of the dissertation by the candidate's committee and at least four weeks prior to graduation, a final oral examination in defense of the candidate's dissertation will be administered by the Department of Microbiology. The department furthermore requires that the candidate's research results be of a quality to be accepted for publication by a scholarly scientific journal.

INSTITUTE OF GENETICS (GEN – 312)

The Institute of Genetics participates in programs through the Department of Microbiology leading to the Master of Science or Doctor of Philosophy degree with a major in genetics. Requirements for degrees are outlined under the Department of Microbiology.

DEPARTMENT OF PHYSICS (PHY – 360)

The Department of Physics offers programs leading to the Master of Arts and the Master of Science degrees. For either degree, a minimum of thirty (30) hours is required. For the Master of Arts degree, a reading knowledge of either French, German, or Russian is required. For the Master of Science degree, the applicant must achieve proficiency in computer science, either through examination or by successfully completing certain computer science courses.

A thesis is required for the Master of Arts and the Master of Science degrees. Research areas from which the thesis may be chosen include magnetic resonance, impurity states in semiconductors, atomic collisons, viscous fluid flow, x-ray crystallography, and mass spectrometry.

The prospective beginning graduate student should have completed mathematics through differential equations, and in addition to introductory physics, courses in mechanics, electricity and magnetism, modern physics and optics. Students with inadequate preparation may be admitted but will be expected to take some make-up courses. Students who plan to do graduate work are expected to take the advanced physics portion of the Graduate Record Examinations.

DEPARTMENT OF POLYMER SCIENCE (PSC – 370)

MASTER'S DEGREE PROGRAM

The Department of Polymer Science offers a Master of Science degree for which a minimum of thirty (30) graduate hours in courses numbered above 600 is required. In addition an original research problem must be completed, terminated with a written thesis.

DOCTOR OF PHILOSOPHY PROGRAM

The Department of Polymer Science offers the Doctor of Philosophy degree for which the general requirements are listed in Part Four of this Bulletin.

A list of additional departmental requirements is available from the chairman. This degree is conferred only in recognition of excellence in research and scholarship.

DEPARTMENT OF SCIENCE EDUCATION (SCE – 380)

The Department of Science Education recognizing the increased emphasis on the art of science teaching and the additional opportunities for individuals with advanced training in these arts provides a program for the Master of Education, Master of Science, Specialist's, Doctor of Philosophy, and Doctor of Education degrees in science education.

Any student who has successfully completed a Bachelor of Science or Bachelor of Arts degree in any area of science or combination of sciences, or has

an equivalent academic preparation in the sciences, who demonstrates a minimum score on the aptitude section of the GRE of 750 for a master's, 800 for a specialist's, and 850 for the doctoral degrees, who has a grade point average of at least 3.0 for a master's, and 3.25 for a specialist's, and who meets the requirements set forth by the Graduate School of the University of Southern Mississippi is eligible to pursue a program in science education. A student who does not meet all of the above requirements may be admitted conditionally.

In addition to the general requirements and procedures pertaining to graduate degrees as outlined in Part III and IV of this **Bulletin**, the following requirements must be fulfilled.

MASTER'S PROGRAM

1. Completion of forty-three (43) or forty-five (45) semester hours of graduate work.
2. A minimum of eighteen (18) semester hours in a specific science–biology, chemistry, earth and environmental sciences, or physics.
3. A minimum of six (6) semester hours in related sciences.
4. Demonstration of competence in the following Professional Education areas:
   (a) Psychology of learning
   (b) History and philosophy of education
   (c) Statistical methods and procedures in education
   (d) Research methods in education
   (e) Guidance and educational testing
   (f) Public School science curriculum
   (f) Problems in science teaching

   Generally, the fulfillment of the above requirements will involve:
   A. Nine (9) to fifteen (15) semester hours in professional education.
   B. Twenty-eight (28) to thirty-six (36) semester hours in the sciences and science education.

Approximately one-third of the graduate work will be in professional education and two-thirds in the sciences. Students with sufficient background are not required to take additional courses in professional education, but will complete their programs in the sciences.

A thesis carrying four semester hours is optional and would substitute for two courses in education. The total program with thesis requires forty-three (43) semester hours graduate credit. The thesis may involve research in a particular science or research in science education.

SPECIALIST'S DEGREE PROGRAM

1. Complete thirty-six (36) semester hours of graduate work beyond the master's level with
2. A minimum of fifteen (15) semester hours in a specific science–biology, chemistry, earth and environmental sciences, and physics, plus six (6) hours in a related science, or mathematics

3. Complete six (6) to nine (9) semester hours of work each in professional education and science education, and
4. Demonstrate competence in the area of professional education as listed above.
5. Demonstrate competence in thesis writing by selecting a topic, doing research, and reporting the findings.

DOCTORAL PROGRAM

1. Complete fifty-four (54) semester hours of graduate work above that accepted at the master's level.
2. A minimum of eighteen (18) semester hours in a specific science—biology, chemistry, earth and environmental sciences, or physics.
3. A minimum of six (6) semester hours in related sciences.
4. Competence in the areas of professional education as listed above.

Generally, the fulfillment of the above requirements will involve:

A. Nine (9) to eighteen (18) hours in professional education
B. Twenty-four (24) or more hours in sciences.
C. Nine (9) or more hours in science education.

In all, two-thirds or more of the graduate work will be in the sciences and science education. In planning the overall program consideration is given to the student's background and his particular interests and goals.

Additional requirements include demonstrated proficiency in educational statistics and independent research. Research, culminating in a dissertation, may deal with a program in the student's science speciality or a problem in science education.

During a student's first or second quarter of enrollment, the department will require a written and/or oral qualifying examination. This examination is designed to assess both the student's fitness to pursue doctoral work and to assist the committee members in planning his doctoral program. A written and/or oral comprehensive examination must be taken at or near the completion of the candidate's course work. Upon acceptance of the dissertation by the candidate's committee and at least four weeks prior to graduation, a final oral examination in defense of the candidate's dissertation will be administered. The Department of Science Education furthermore requires that the candidate's research be acceptable for publication in journals in his field.

In addition to an evaluation of the student's record, tests and examinations are used for diagnostic purposes in planning programs. The Graduate Record Examinations verbal and quantitative scores should be submitted with the application for advanced graduate study.

SCHOOL OF SOCIAL WORK

Lester J. Glick, Dean

The School of Social Work will admit 25 students in the Spring of 1974 for admission to the first class in the Fall of 1974.

Social work as a profession has the following characteristics:

1) Professional degrees at baccalaureate and master's levels;
2) Opportunity to help people in realizing their potentials;
3) Opportunity to work with individuals, groups, and communities;
4) Leadership opportunities at the master's level - direct service opportunities at the baccalaureate level; and
5) Challenging opportunities to work in many settings, performing various roles in the context of working creatively at various community social problems.

The School of Social Work will prepare students for work in the following settings:

1) Public social service settings - public welfare;
2) Health settings - Veterans Administration hospitals, general hospitals, health centers and clinics;
3) Mental retardation settings - programs and services to develop self-sufficienty, institutional services;
4) Mental health settings - mental health clinics, mental hospitals, health settings;
5) Settings for services to older persons - group work, services to individuals, program development, retirement homes; and
6) Leadership roles in various settings - supervision, consultation, administration of social welfare agencies.

Inquires concerning the curriculum of the School should be directed to:

Dr. Lester J. Glick, Dean
School of Social Work
University of Southern Mississippi
Southern Station, Box 114
Hattiesburg, Mississippi 39401

Inquiries concerning admission to the School should be directed to:

Dean of Admissions
University of Southern Mississippi
Southern Station, Box 11
Hattiesburg, Mississippi 39401

REQUIRED COURSES

First Quarter **Hours**

610–Determinants of Social Functioning-Micro 3

615–Social Problems and Social Welfare 3
638–Facilitative Conditions for Services 2
624–Personal/Professional Growth I 1
617–Scientific Inquiry 1
612–Small Group Theory 1
639–Problems Solving 1
Total 12

Second Quarter

611–Determinants of Social Functioning-Macro 2
630–Professional Communication 3
631–Leadership 2
625–Personal/Professional Growth II 1
634–Cultural Components of Social Work Practice 2
636–Primary Skills in Macro-System Intervention 2
Total 12

Third Quarter

671–Field Instruction 6
681–Target Population Specialization Practice Seminar 1
626–Personal/Professional Growth III 1
650 to 659–Advanced Practice Electives 2
Total 10

Fourth Quarter

672–Field Instruction 6
650 to 659–Advanced Practice Electives 2-4
627–Personal/Professional Growth IV 1
Total 9-11

Fifth Quarter

681–Target Population Specialization Practice Seminar 1-3
628–Personal/Professional Growth V 1
650 to 659–Avanced Practice Electives 4-6
560–Methods of Social Research 3
Total 9-13

Sixth Quarter

673–Field Instruction 6
629–Personal/Professional Growth VI 1
650 to 659–Advanced Practice Electives 1-2
618–Social Science Concepts: Strategies for Social Policy 2
691–Individualized Study on Evaluation of Practive 1-3
Total 11-14

Courses from Other Departments **Hours**

PSY 734–Principles of Behavior Modification 3
PSY 755–Personality 3
PSY 555–Psychology of Personality 3
PSY 536–Abnormal Psychology 3
SOC 560–Methods of Social Research 3
EPY 731–Community Mental Health 3
SOC 524–Sociology of Aging 3

PART SIX

COURSE DESCRIPTIONS

INDEX OF ABBREVIATIONS FOR FIELDS OF INSTRUCTION

AA Allied Arts
AAC Athletic Administration and Coaching
ACC Accounting
AED Educational Administration and and Supervision
AMS American Studies
ANT Anthropology
AOS Aerospace Studies
APM Applied Music
ARE Art Education
ART Art
AST Astronomy
BED Business Education
BIO Biology
CD Child Development
CGE Counseling and Guidance
CHE Chemistry
CIA Adult Education
CIE Elementary Education
CIF Educational Foundations
CIS Secondary Education
CJ Criminal Justice Studies
CLT Comparative Literature
COM Communication
CSS Computer Science and Statistics
CT Clothing and Textiles
ECO Economics
ENG English
EPY Educational Psychology
ESC Environmental Technology
EVD Environmental Design
FIN Finance
FL Foreign Languages
FN Food and Nutrition
FS Fundamentals of Science
FST Food Science and Technology
GEN Genetics
GHY Geography
GLY Geology
HEE Home Economics Education
HHM Housing and Home Management
HIS History
HTH Health; see also Athletic Administration and Coaching
IAD Institution Administration
IVE Industrial and Vocational Education
JOU Journalism
LS Library Science
MAT Mathematics
MED Music Education
MFL Marriage and Family Life
MGT Management
MIC Microbiology
MKT Marketing
MS Military Science
MTC Medical Technology
MUS Music
NSG Nursing
OHC Honors Center
PA Public Address
PE Physical Education; see also Athletic Administration and Coaching
PHI Philosophy
PHY Physics
PS Political Science
PSC Polymer Science
PSY Psychology
REC Recreation
RED Educational Research Training
REL Religion
RTF Radio-Television-Film
SCE Science Education
SCI Science
SHS Speech and Hearing Science
SOC Sociology
SPE Special Education
SWK Social Work
TEC Technology
THE Theatre Arts
THY Therapy

EXPLANATION

The numerical listing after the course title gives the following information: *first number, semester credit hours; second number, lecture hours per week; third number, laboratory hours per week; F* (Fall), *W* (Winter), *S* (Spring), *Su* (Summer), *Q* (Quarterly), *X* (As Needed), *F*, 1976 (will be offered Fall, 1976).

Example:

201—*Principles of Accounting I.* 3-4-0-*Q.* (3 semester hours credit, 4 hours lecture per week, no laboratory, Quarterly).

Some courses (such as Student Teaching) require many hours of outside work. These courses are listed as: 9-0-0, meaning that the hours of classwork maybe in or out of a class room.

ACCOUNTING (ACC-605)

502. **Advanced Accounting II.** 3-4-0-Q. Prerequisite: ACC 401 or consent of instructor. A brief introduction to consolidated financial statements, accounting for fiduciaries, governmental accounting, and actuarial science.

505. **Current Accounting Theory and Research.** 3-4-0-Q. Prerequisites: ACC 330, 401, 402, 409 or consent of instructor. The study of current accounting problems, with special emphasis on the published bulletins (pronouncements) of professional accounting organizations.

520. **Advanced Cost Accounting and Budgeting.** 3-4-0-Q. Prerequisite: ACC 320. A study of the development of accounting data for managerial use, including budgetary procedures and control.

530. **Federal Income Tax Accounting II.** 3-4-0-S. Prerequisite: ACC 330. A continuation of ACC 330 with emphasis on research in taxation and guides for partnerships, estates, trusts, and corporations.

550. **Accounting Systems.** 3-4-0-X. Prerequisite: ACC 409. A study of the nature and procedure of systems work with attention given to the design and use of mechanical and computer oriented accounting systems.

592. **Research in Accounting Problems.** 1-3 hrs. arr. X. Prerequisite: Permission of adviser. Individual study of specific topics in accounting.

604. **Financial Accounting Analysis.** 3-4-0-X. Prerequisite: Graduate standing. A one-semester introduction to accounting principles. A substitute for ACC 201 and ACC 202. May not be included in hours required for a master's degree.

605. **Advanced Accounting Theory.** 3-4-0-W. Prerequisites: 15 hours of accounting above accounting principles. An extensive study of financial accounting literature including current areas of controversy.

610. **Advanced Auditing.** 3-4-0-F. Prerequisites: 15 hours of accounting above accounting principles including ACC 409 or equivalent. A study of current topics in public accounting practice.

620. **Advanced Cost Accounting Problems and Controllership.** 3-4-0-S. Prerequisites: 15 hours of accounting above accounting principles including ACC 320 or equivalent. A study of cost concepts and the controllership function with emphasis on the current role of costs in managerial planning, control, and policy making.

625. **Managerial Accounting.** 3-4-0-F,S,Su. Prerequisite: Principles of Accounting. A study of the potential managerial uses of accounting information for planning and control. (Not to be taken by accounting emphasis students.)

630. **Tax Planning and Research.** 3-4-0-Su. Prerequisites: ACC 330 and 430 or equivalent. A study of tax planning and reporting, the library of tax services, preparation of tax briefs, and client representation.

640. **Contemporary Accounting Problems.** 3-4-0-S. Prerequisite: ACC 405 and 409 or consent of instructor. A study of problem solving techniques with an emphasis on those types of problems which have appeared on recent CPA examinations.

692. **Special Problems in Accounting.** 3 hrs. arr. Q. Individual study of specific topics in accounting.

698. **Thesis.** 6 hrs. arr. Q.

ADULT EDUCATION (CIA-110)

540. **Methods and Materials in Adult Education.** 3-4-0-W,Su. A course in method and format of instructional materials for adults with emphasis on self-instructional techniques.

541. **Foundations of Reading Instruction for the Adult.** 3-4-0-Q. This course involves an examination of the basis of reading instruction for the non-literate adult.

542. **Methods and Materials for Teaching Adults to Read.** 3-4-0-Q. Instructional and diagnostic materials and methods for dealing with functionally illiterate adults.

545. **Teaching the Disadvantaged Adult.** 3-4-0-F. A study of the educational problems of culturally deprived and handicapped adult in terms of programs and procedures found to be successful.

590. **Special Problems in Adult Education.** 1-3 hrs. arr. Q. Special areas of interest arranged for an individual or a group with common interests.

601. **Principles of Adult Education.** 3-4-0-F. A survey of the history philosophies, form, structure and current developments in the field of adult education.

607. **Program Planning and Curriculum Development in Adult Education.** 3-4-0-S. The design of programs and courses of study related to a wide variety of adult education agencies.

797. **Independent Study and Research.** Hrs. arr. Q. Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a research problem or a dissertation and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

798. **Research Problems.** Hrs. arr. Q. A field study or thesis type research study representing the major research component of the Specialist's degree.

898. **Dissertation.**

ALLIED ARTS (AA-655)

700. **Aesthetics in the Arts.** 3-4-0-Su. Emphasis is placed upon an analysis of artistic expression and the affective quality of experiences with the fine arts.

ANTHROPOLOGY (ANT-286)

511. **Comparative Indo-European Studies.** 3-4-0-S. A survey of contemporary Indo-European studies designed to illustrate the proper use of the comparative method.

512. **Mythology and Folklore.** 3-4-0-W. The utilization of folklore and mythological data in anthropological research.

513. **History and Anthropological Theory.** 3-4-0-S. A general survey of the history of anthropology and of the major schools of anthropological theory.

514. **Methods and Field Work In Archeology.** 3-2-2-S. Methodology and

techniques of archeological field work, including participation in organized field projects.

698. **Thesis.** 6 hrs. arr. **X.**

701. **Anthropological Research Methods.** 3-4-0-X. Ethnographic methodology and use of quantitative techniques in anthropological research.

702. **Advanced Physical Anthropology.** 3-4-0-X. The ethnogenesis of living hominids. Biometrics, serology, comparative morphology and biochemical markers.

703. **Prehistoric Archeology.** 3-4-0-X. A survey of prehistoric archeology with emphasis on the Old World.

704. **Classical Archeology.** 3-4-0-X. The archeology of complex societies with particular reference to the Aegean area.

705. **Psychological Anthropology.** 3-4-0-F. The evolution of the hominid brain and a cross-cultural analysis of basic personality formation in primitive societies.

706. **Economic Anthropology.** 3-4-0-W. The evolution of economic systems and the relative role of economic forces in the determination of social change.

707. **Applied Anthropology.** 3-4-0-S. The application of anthropology to the solution of contemporary social and cultural problems.

711. **Seminar in Anthropology.** 3-4-0-F. Research and tutorial in general anthropology.

712. **Seminar in Ethnology.** 3-4-0-X. Individually designed and supervised studies in ethnology.

713. **Seminar in Physical Anthropology.** 3-4-0-X. Individually designed and supervised studies in physical anthropology. Seminar discussion on methodology and findings.

698. **Thesis.** 6 hrs. arr. **X.**

APPLIED MUSIC AND ORGANIZATIONS (APM-670)

601, 602, 603. **Piano.** 1-3 hrs. arr.
611, 612, 613. **Organ. 1-3 hrs. arr.**
614, 615, 616. **Flute. 1-3 hrs. arr.**
617, 618, 619. **Oboe.** 1-3 hrs. arr.
620, 621, 622. **Clarinet.** 1-3 hrs. arr.
623, 624, 625. **Saxophone.** 1-3 hrs. arr.
626, 627, 628. **Bassoon.** 1-3 hrs. arr.
629, 630, 631. **Horn.** 1-3 hrs. arr.
632, 633, 634. **Trumpet.** 1-3 hrs. arr.
635, 636, 637. **Trombone.** 1-3 hrs. arr.
638, 639, 640. **Euphonium.** 1-3 hrs. arr.
641, 642, 643. **Tuba.** 1-3 hrs. arr.
644, 645, 646. **Violin.** 1-3 hrs. arr.
647, 648, 649. **Viola.** 1-3 hrs. arr.
650, 651, 652. **Cello.** 1-3 hrs. arr.
653, 654, 655. **String Bass.** 1-3 hrs. arr.
656, 657, 658. **Percussion.** 1-3 hrs. arr.

661, 662, 663. **Voice.** 1-3 hrs. arr.
664, 665, 666. **Harp.** 1-3 hrs. arr.
671, 672, 673. **Ensemble.** 1 hr. arr.
681. **Orchestra.** 1 hr. (May be taken three times.)
682. **Band.** 1 hr. (May be taken three times.)
683. **Chorus.** 1 hr. (May be taken three times.)
691, 692, 693. **Composition.** 1-3 hrs. arr.
701, 702, 703. **Piano.** 1-3 hrs. arr.
711, 712, 713. **Organ.** 1-3 hrs. arr.
714, 715, 716. **Flute.** 1-3 hrs. arr.
717, 718, 719. **Oboe.** 1-3 hrs. arr.
720, 721, 722. **Clarinet.** 1-3 hrs. arr.
723, 724, 725. **Saxophone.** 1-3 hrs. arr.
726, 727, 728. **Bassoon.** 1-3 hrs. arr.
729, 730, 731. **Horn.** 1-3 hrs. arr.
732, 733, 734. **Trumpet.** 1-3 hrs. arr.
735, 736, 737. **Trombone.** 1-3 hrs. arr.
738, 739, 740. **Euphonium.** 1-3 hrs. arr.
741, 742, 743. **Tuba.** 1-3 hrs. arr.
744, 745, 746. **Violin.** 1-3 hrs. arr.
747, 748, 749. **Viola.** 1-3 hrs. arr.
750, 751, 752. **Cello.** 1-3 hrs. arr.
753, 754, 755. **String Bass.** 1-3 hrs. arr.
756, 757, 758. **Percussion.** 1-3 hrs. arr.
761, 762, 763. **Voice.** 1-3 hrs. arr.
764, 765, 766. **Harp.** 1-3 hrs. arr.
771, 772, 773. **Ensemble.** 1 hr. arr.
781. **Orchestra.** 1 hr. (May be taken three times.)
782. **Band.** 1 hr. (May be taken three times.)
783. **Chorus.** 1 hr. (May be taken three times.)
791, 792, 793. **Composition.** 1-3 hrs. arr.
801, 802, 803. **Piano.** 1-3 hrs. arr.
811, 812, 813. **Organ.** 1-3 hrs. arr.
814, 815, 816. **Flute.** 1-3 hrs. arr.
817, 818, 819. **Oboe.** 1-3 hrs. arr.
820, 821, 822. **Clarinet.** 1-3 hrs. arr.
823, 824, 825. **Saxophone.** 1-3 hrs. arr.
826, 827, 828. **Bassoon.** 1-3 hrs. arr.
829, 830, 831. **Horn.** 1-3 hrs. arr.
832, 833, 834. **Trumpet.** 1-3 hrs. arr.
835, 836, 837. **Trombone.** 1-3 hrs. arr.
838, 839, 840. **Euphonium.** 1-3 hrs. arr.
841, 842, 843. **Tuba.** 1-3 hrs. arr.
844, 845, 846. **Violin.** 1-3 hrs. arr.
847, 848, 849. **Viola.** 1-3 hrs. arr.
850, 851, 852. **Cello.** 1-3 hrs. arr.
853, 854, 855. **String Bass.** 1-3 hrs. arr.

856, 857, 858. **Percussion.** 1-3 hrs. arr.
861, 862, 863. **Voice.** 1-3 hrs. arr.
864, 865, 866. **Harp.** 1-3 hrs. arr.
871, 872, 873. **Ensemble.** 1 hr. arr.
881. **Orchestra.** 1 hr. (May be taken three times.)
882. **Band.** 1 hr. (May be taken three times.)
883. **Chorus.** 1 hr. (May be taken three times.)
891, 892, 893. **Composition.** 1-3 hrs. arr.

ART (ART-660)

600. **Studio Foundations.** 3-4-0-X. A review, through studio problems, of some fundamental problems of plastic expression. Hours earned may not be used to fulfill degree requirements.
601. **Drawing Studio.** 3-9 hrs. arr. X.
621. **Painting Studio.** 3-9 hrs. arr. X.
651. **Ceramic Studio.** 3-9 hrs. arr. X.

ART EDUCATION (ARE-665)

513. **Crafts II.** 3-1-3-X. A study of the techniques and problems involved in the creation and design of jewelry.
514. **Crafts III.** 3-1-3-X. A study of the techniques and problems involved in the creation of surface designs for fabrics.
600. **Art Education Theory.** 2-2-1-X. A comprehensive survey of Art Education trends and philosophies.
601. **Introduction to Research in Art Education.** 3-3-1-S. A study of current research and research techniques in the area; includes the compilation of bibliographic material and the organization of research projects.
602. **Art Techniques and Materials for Teachers.** 3-1-3-X. A comprehensive survey of teaching techniques emphasizing the pedagogical potential and limitation of plastic media.
603. **Characteristics of Visual Relationships for Teachers.** 3-1-3-X. A course dealing with the teaching of the visual characteristics and arrangement of visual relationships.
604. **Teaching the Exceptional Student Contemporary Processes.** 3-1-3-X. A course devoted to the pedagogical potential of contemporary processes for use with exceptional students.
605. **Techniques of Dissemination of Student Art Work.** 3-1-3-X. Techniques of advanced pedagogy in the selection, display, and showing of student work.
615. **Trends in Current Plastic Expression.** 3-2-2-Su. A course designed to keep the student abreast of current trends in the plastic arts.
616. **Advanced Art Seminar for Teachers in Elementary Education.** 3-2-2-X. An advanced study of the scope and sequence of art education curriculums. The coordination of art programs with sequential studies will be stressed.
620. **Adapting Selected Current Art Trends to School Practice.** 3-2-2-X. Current

art trends are identified and selections of them are developed in terms of philosophies, practitioners, background, and techniques.

621. **Crafts: Jewelry Design for Teachers. 3-1-3-X.** The study of concepts inherent in visual forms as pertaining to the jewelry crafts. Study is in the disciplines associated with techniques, media, and aesthetics of metal.

625. **Supervision of Art Education Programs. 3-2-2-F.** A study of the problems involved in the supervision of public school art programs in grades K through twelve.

626. **Curriculum and Instruction in Art Education. 3-3-1-W.** A study of the art curriculums and instructional programs in the public schools in grades K through twelve.

691. **Research in Art Education.** 1-9 hrs. arr. **X.** Prerequisite: Approval of the major professor.

692. **Special Studies in Art Education I, II, III.** 1-3 hrs. arr. **X.**

697. **Independent Study and Research.** 1-12 hrs. arr. **X.** Not to be counted as credit toward a degree. Students who are not in residence but are actively working on a thesis and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

698. **Thesis.** 6 hrs. arr. **X.** A conventional thesis, or a catalogued exhibition, or an exhibition with a supporting paper.

BIOLOGY (BIO-305)

501. **History of Biology. 2-2-0-X.** Lectures and papers concerning the development of biological sciences.

510. **Electron Microscopy. 3-3-3-X.** Theory and use of the electron microscope and associated instrumentation, and darkroom techniques.

511. **Histology. 3-3-2-X.** Microscopic anatomy of mammalian organ systems.

520. **Embryology I. 3-2-4-W.** Embryology of vertebrates. Maturation, fertilization, cleavage, origin and development of germ layers, histogenesis, and organogenesis.

521. **Embryology II. 3-2-4-X.** Prerequisite: BIO 520. The embryological development of vertebrates, especially the chicken and the pig.

522. **Experimental Embryology. 3-2-4-X.** Prerequisites: BIO 520 and 521. Factors which activate or regulate developmental processes.

523. **Protozoology. 3-2-4-X.** Introduction to parasitic and free-living protozoa.

524. **Human Protozoology. 3-2-4-W,Su.** Life histories, epidemiology, and diagnostic characteristics of protozoans parasitic in man.

525. **Human Helminthology. 3-2-4-F,Su.** Life histories, systematics, and host relationships of helminths of medical significance.

526. **Medical Entomology. 3-2-4-W.** Prerequisite: Consent of instructor. Anthropod vectors and agents of disease.

530. **Mammalian Physiology I. 3-3-2-F.** Prerequisites: BIO 320 and 321. Functioning of major mammalian systems emphasizing interrelationships and regulation.

531. **Mammalian Physiology II. 3-3-2-W.** Prerequisite: BIO 530. Study of system function, coordination, and control.

532. **Comparative Animal Physiology I.** 3-2-4-W. Prerequisites: 12 hours of biology, 9 hours of chemistry. Comparison of systems and adaptations of invertebrates and vertebrates.

533. **Comparative Animal Physiology II.** 3-2-4-S. Prerequisite: BIO 532. Comparison of functions in relation to the environment.

534. **Endocrinology.** 3-3-0-W. Prerequisite: Consent of instructor. Survey of the endocrine glands and their role in regulating the physiological processes of mammals.

536. **Invertebrate Zoology I.** 3-2-4-F. Survey of Invertebrate Phyla Protozoa to Annelida.

537. **Invertebrate Zoology II.** 3-2-4-W. Prerequisite: BIO 536. Survey of Invertebrate Phyla through Hemichordata.

538. **Entomology.** 3-2-4-F. Structural adaptations, classification, life histories and habits, and the economic importance of insects.

540. **Ichthyology.** 3-2-4-F. Collection, preservation, and identification of local fishes and fish-like vertebrates, with emphasis on fresh water.

541. **Ornithology.** 3-2-4-S. Prerequisites: BIO 320 and 321 recommended. Morphology, taxonomy, life history, distribution, evolution, and adaptations of birds.

542. **Mammalogy.** 3-2-4-W. Prerequisites: BIO 320 and 321 recommended. Morphology, taxonomy, life history, distribution, evolution, and adaptations of mammals.

543. **Principles of Nomenclature.** 2-2-0-X. Prerequisite: Consent of instructor. Discussions and problems of biological nomenclature.

548. **Introductory Mycology.** 3-2-4-W. Prerequisite: Consent of instructor. Taxonomy, physiology, and biochemistry of fungi.

549. **Introductory Phycology.** 3-2-4-X. Prerequisite: Consent of instructor. Taxonomy, physiology, and biochemistry of the algae.

550. **Plant Anatomy.** 3-2-4-X. A study of the anatomy of vascular plants.

551. **Morphology of Non-Vascular Plants.** 3-2-4-W. Life cycles, evolution, and diagnostic characteristics of representative algae, fungi, lichens, liverworts, and mosses.

552. **Morphology of Vascular Plants.** 3-2-4-S. Life cycles, evolution, and diagnostic characteristics of representative ferns, fern allies, and seed plants.

553. **Aquatic and Marsh Plants.** 3-2-4-F,S. Collection, identification, and ecology of aquatic and marsh plants of fresh and brackish water.

554. **Plant Physiology.** 3-2-4-X. Prerequisite: Organic chemistry recommended. The basic physiological processes of green plants.

555. **Economic Botany.** 3-2-4-X. Origin, distribution, and significance of plants most important to man.

556. **Plant Pathology.** 3-2-4-X. Taxonomy, physiology, and control of economically important plant pathogens.

557. **Taxonomy of Higher Plants.** 3-2-4-X. The classification of seed plants.

560. **Biogeography.** 2-2-0-W. A descriptive and analytical study of the distribution of plants and animals.

561. **Ecology I.** 3-2-4-F. Prerequisite: Consent of instructor. Interrelations

between organisms and their environment. Biogeochemical cycles. Limiting factors, productivity, and energy transfer. Ecological succession.

562. **Ecology II.** 3-2-4-W. Prerequisite: BIO 561. Ecological effects of environmental factors and relationship of respiration and osmoregulation. Population growth.

565. **Freshwater Biology.** 3-3-4-F,Su. Prerequisite: Consent of instructor. Collection, identification, and ecology of aquatic organisms significant to the assessment of water quality.

566. **Limnology.** 3-2-4-S. Prerequisites: BIO 561 and 562 or consent of instructor. The physical, chemical, and biological conditions in lakes, ponds, and streams.

567. **Introduction to Biological Oceanography.** 3-2-4-X. Prerequisites: BIO 561 and 562. Ocean basin topography, distribution of bottom sediments, and physical and chemical characteristics of sea water.

570. **Ecology of Parasitic and Vector-Borne Diseases.** 2-2-0-X. Prerequisite: Consent of instructor. Transmission and pathogenesis of parasitic and vector-borne diseases in their ecological frameworks.

575. **Plant Ecology.** 3-2-4-X. Relationship of plants to their environment.

593. **Field Biology.** 1-6 hrs. arr. X. Prerequisite: Consent of instructor. Ecological and taxonomic studies of the fauna and flora of a variety of habitats. Offered between quarters as 4 to 6 day field trips.

692. **Biological Problems.** 1-6 hrs. arr. Q. Given only by special arrangement. Courses in special techniques, designed for majors with a need for certain basic techniques as tools for research.

697. **Independent Study and Research.** 1-9 hrs. arr. X. Not to be counted as credit toward a degree. Students who are not in residence but are working on a thesis and using University facilities must enroll in this course.

698. **Thesis.** 1-6 hrs. arr. X.

703. **Advanced Botany.** 3-2-4-X. The general physiology and ecology of seed plants.

704. **Biological Photography.** 2-1-2-X. Techniques of biological photography.

705. **Analytical Methods in Biological Research.** 3-2-2-X. Prerequisite: Consent of instructor. Special techniques of data gathering and interpretation.

712. **Cytology.** 3-4-0-W. Prerequisite: Consent of the instructor. Cellular morphology, metabolism, growth, differentiation, and reproduction.

716. **Cell Ultrastructure.** 3-4-0-X. Prerequisite: Consent of instructor. Structure and function of cells and cell organelles at the sub-cellular level.

718. **Cytochemical Techniques.** 3-2-4-X. Prerequisites: BIO 410 or 510 recommended, and permission of instructor. Techniques of cytochemical characterization of biologically significant compounds at the light and electron microscopic levels.

721. **Advanced Systematic Herpetology.** 3-2-4-W. Prerequisites: BIO 339 and consent of instructor. Systematics, natural history, distribution, and economic importance of reptiles and amphibians.

726. **Advanced Systematic Ichthyology.** 3-2-4-F. Prerequisites: BIO 440 or 540 and consent of instructor. Systematics, natural history, distribution, and economic importance of fishes.

727. **Speciation.** 2-2-0-F. Prerequisite: GEN 402 or 502. Current concepts of phylogeny and origin of the species.

728. **Planktology.** 3-2-4-S. Prerequisite: BIO 436 or 536. The morphological adaptations and life histories of plankton.

729. **Invertebrate Physiology.** 3-2-4-X. Prerequisite: Consent of instructor. General principles of invertebrate physiology with emphasis on growth and reproduction.

730. **Helminthology.** 3-2-4-X. Prerequisites: BIO 424 or 524 and 425 or 525. Systematics, morphology, and host-relationships of helminths.

731. **Physiology of Marine Animals.** 3-3-0-X. The environmental physiology of marine animals.

732. **Seminar in Animal Behavior.** 2-2-0-F. Special topics in ethology, in areas of individual interest.

733. **Seminar in Physiology.** 2-2-0-X. Special topics in physiology in areas of individual interest.

734. **Experimental Endocrinology.** 3-2-4-S,Su. Prerequisite: BIO 434 or 534. Experimental approach to the study of hormones, utilizing techniques of bioassay and surgery.

739. **Invertebrate Embryology.** 3-2-4-S. Prerequisite: Consent of instructor. The embryology of invertebrates, emphasizing that of marine animals.

750. **Advanced Taxonomy of Seed Plants.** 3-2-4-X. Prerequisite: BIO 457 or 557. Experimental approaches to problems in plant taxonomy. Laboratory devoted to classification of seed plants.

752. **Experimental Phycology.** 3-4-0-X. Prerequisite: Consent of instructor. Experimental studies in phycology, with emphasis on special techniques of study.

754. **Experimental Mycology.** 3-4-0-X. Prerequisite: Consent of instructor. Experimental studies in mycology, utilizing special techniques of study.

760. **Topics in Marine Biology.** 2-2-0-F,S. Special topics in marine physiology and biochemistry.

763. **Fisheries Biology.** 3-2-4-W. Prerequisites: BIO 440 or 540, and BIO 466 or 566 highly recommended. Ecology and conservation of fishes.

765. **Biological Oceanography.** 3-2-4-S,Su. Prerequisite: BIO 462 or 562. The sea as a biological environment.

767. **Marine Ecology.** 3-2-4-S. Prerequisite: BIO 462 or 562. The physical and chemical nature of the marine environment and the ecology of marine organisms.

768. **Aquaculture.** 3-2-4-S,Su. Prerequisite: Consent of instructor. Production of aquatic organisms in natural and artificial environments. Propogation, harvesting, disease control and water quality management.

789. **Biology Seminar.** 1-1-0-X. The presentation of current concepts in special areas of individual interest.

791. **Research in Biology.** 1-9 hrs. arr. Q. Prerequisite: Approval of the major professor.

792. **Special Problems.** 2-6 hrs. arr. Q.

793. **Research in Zoology.** 1-6 hrs. arr. Q.

797. **Independent Study and Research.** 1-9 hrs. arr. X. Not to be counted as

credit toward a degree. Students who are not in residence but are working on a dissertation and using University facilities must enroll in this course.

898. **Dissertation.**

COURSES TAUGHT AT THE GULF COAST RESEARCH LABORATORY IN OCEAN SPRINGS BY THE GULF COAST RESEARCH LABORATORY STAFF

581. **Marine Vertebrate Zoology. 6-4-4-Su.** Lecture and laboratory survey of all marine chordates, including the lower subphyla, the fishes, reptiles, mammals, and shore birds.

583. **Marine Invertebrate Zoology I. 6-4-4-Su.** Morphology, distribution, and ecology of the phyla from Protozoa through Lophophorata.

584. **Marine Invertebrate Zoology II. 6-4-4-Su.** Prerequisite: BIO 583. Morphology, distribution, and ecology of the protostome and deuterostome phyla from Mollusca through the protochordates.

585. **Parasites of Marine Animals. 6-4-4-Su.** Prerequisite:Consent of instructor. Parasites of marine animals, with emphasis on morphology, taxonomy, life histories, and host-parasite relationships.

588. **Introduction to Marine Zoology. 4-2-4-Su.** Prerequisite: 12 hours of biology. Carries no credit for biology majors. Weekly boat trips and guest lecturers.

589. **Marine Botany. 4-2-4-Su.** Prerequisites: General botany and plant taxonomy. Identification and distribution of marine algae and common maritime flowering plants.

781. **Marine Fisheries Biology. 6-4-4-Su.** Prerequisite: Statistics recommended. A general statistical review of the world fisheries with special emphasis on the United States.

782. **Advanced Problems in Marine Microbiology. 2-6 hrs. arr. X.** Supervised research problems and projects selected to meet the needs of the graduate students of microbiology or marine biology.

783. **Biological Electron Microscopy I. 3-2-4-X.** Offered only to graduate students conducting dissertation research in ultrastructure at the Gulf Coast Research Laboratory. A study of tissue preparation, theory, and techniques of ultramicrotomy, and an introduction to the fundamentals of electron microscopy.

784. **Biological Electron Microscopy II. 3-2-4-X.** Prerequisite: BIO 783. A study of special techniques and the operation and maintenance of an electron microscope.

785. **Marine Microbiology. 5-3-4-Su.** Prerequisites: General microbiology or consent of instructor. Examination of microbial flora of representative environments. Taxonomy, physiology, economic significance, and effect upon biological communities.

786. **Marine Phycology. 2-6 hrs. arr. X.** Areas of concentration according to seasonal activities and needs or interest of the student.

787. **Research in Marine Biology. 2-6 hrs. arr. X.**

BUSINESS EDUCATION (BED-105)

552. **Philosophy of Vocational Business Education.** 3-4-0-W. History; changing concepts, trends, occupations, employment opportunities, procedures, and techniques.

553. **Coordination of Office Occupations Programs.** 3-4-0-Su. Problems in developing cooperative office occupations programs to meet the needs of student workers and businesses.

560. **Office Management.** 3-4-0-F,W,S. Principles of management as applied to office systems, organization, supervision, data processing, layout, machines, personnel, forms, reports, and services.

580. **Research and Report Writing.** 3-4-0-S. Concepts and methods of business research and style; problems encountered in researching and reporting business data in written reports.

604. **Foundations in Business Education.** 3-4-0-X. Examination and analysis of the history and philosophy of business education.

608. **Curriculums in Business Education.** 3-4-0-Su. Curriculum construction; content organization; selection and preparation of instructional materials; and application of instructional techniques.

651. **Principles of Business Education.** 3-4-0-F. Junior high school through university programs; guidance; qualifications and professional activities of teacher; and public relations.

652. **Seminar in Business Education.** 3-4-0-Su. An intensive study of specific problems in business education, and a survey of literature pertaining to the problems.

653. **Improvement of Instruction in Bookkeeping and Related Basic Skills.** 3-4-0-X. Methodology; instructional materials; evaluation; review of significant research.

654. **Improvement of Instruction of Basic Business.** 3-4-0-X. Objectives, teaching procedures, instructional materials, and other related problems. Significant related research is studied.

655. **Improvement of Instruction in Typewriting and Related Skills.** 3-4-0-X. Teaching procedures; instructional materials; measurement of skills; standards of achievement; review of related research.

656. **Improvement of Instruction in Shorthand and Transcription.** 3-4-0-X. Methodology; instructional materials; transcription problems; standards of achievement; review of related research.

669. **Measurement and Evaluation in Business Education.** 3-4-0-S. Concept of evaluation; construction, selection, administration, and scoring of tests; review of related research.

670. **Problems in Vocational Cooperative Office Education.** 3-4-0-X. Analysis of problems in administering cooperative office education programs.

691. **Research in Business Education.** 1-9 hrs. arr. Q.

692. **Special Problems I, II, III.** 1 hr. each. Arr. Q. Prerequisite: 9 semester hours of advanced courses in business education. Scholarly paper on approved problem.

694. **Field Problems.** 3 hrs. arr. Q.

697. **Independent Study and Research.** Hrs. arr. **X.** Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a thesis, and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

698. **Thesis.** 6 hrs. arr. **X.** Credit is deferred until thesis is completed.

701. **Seminar in Business Education.** 3-4-0-X. Analysis and evaluation of significant research studies in the field of business education and research of a problem.

750. **Business Education in the Junior College.** 3-4-0-X. Forces affecting the junior college business curricula; philosophy; programs; public relations; trends; and significant related research.

760. **Administration and Supervision of Business Education.** 3-4-0-X. Principles; techniques of administration and supervision of business education in junior high, senior high, evening schools, and colleges.

780. **Readings in Business Education.** 3-4-0-X. Readings in both periodical literature and research. Presentation of findings in a scholarly report.

797. **Independent Study and Research.** Hrs. arr. **X.** Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a research problem and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

798. **Research Problems.** 3-4-0-X.

CHEMISTRY (CHE-320)

502. **Chemistry of the Atmosphere.** 4-4-3-X. Prerequisite: CHE 312. Topics are: radiocarbon cycle, atmospheric photochemistry, weather patterns, greenhouse effect, combustion pollutants, health hazards, etc.

503. **Industrial Chemistry.** 3-4-0-X. Prerequisite: Permission of the instructor. A study of the more important processes used in industry. Invited industrial representatives and plant visits keep the topic current and useful.

511. **Instrumental Analysis.** 4-2-6-S. Prerequisite: CHE 353 and 312. Theory and practice of analytical instrumentation; absorption spectroscopy, chromatography, mass spectroscopy, and magnetic resonance.

521. **Introduction to Biochemistry.** 4-4-3-F,Su. Prerequisite: CHE 353. The properties of amino acids, proteins, carbohydrates, lipids, and nucleic acids; actions of enzymes and protein synthesis.

522. **Intermediary Metabolism.** 4-4-3-W,Su. Prerequisite: CHE 521. A study of the major metabolic pathways with emphasis on energy considerations and interrelationships of the pathways.

541. **Application of Nuclear Techniques.** 4-4-3-X. Prerequisite: Permission of the instructor. Applied biological, chemical, environmental, etc., problems. Topics: radioisotope handling, radiation detection, shielding, tracer techniques, etc.

551. **Qualitative Organic Analysis I.** 2-1-3-W. Prerequisite: CHE 353. The systematic identification of pure organic chemicals.

552. **Qualitative Organic Analysis II.** 2-1-3-S. Prerequisite: CHE 551. A study of

the analysis of mixtures, with emphasis on chromatographic separation techniques and spectroscopic methods of analysis.

561. **Physical Chemistry.** 3-3-3-F. Prerequisites: MAT 277 and CHE 353. Topics: chemical thermodynamics, kinetics, surface phenomena, quantum chemistry, symmetry, spectroscopy, and molecular structure.

562. **Physical Chemistry.** 3-3-3-W. Prerequisite: CHE 561. A continuation of CHE 561.

563. **Physical Chemistry.** 3-3-3-S. Prerequisite: CHE 562. A continuation of CHE 562.

601. **Introductory Structural Chemistry.** 3-4-0-F. Prerequisite: Permission of the instructor. A study of symmetry including group theory and point group designation, stereochemistry, and the origin of spectra.

602. **Spectral Elucidation of Structure.** 3-4-0-W. Prerequisite: Permission of the instructor. Applications of vibrational, electronic, nuclear magnetic resonance, and mass spectroscopy to structure determination.

603. **Introduction to Kinetics and Synthesis.** 3-4-0-S. Prerequisite: Permission of the instructor. An introduction to kinetics, synthesis (a general approach to both inorganic and organic), and separations.

610. **Problems in Analytical Chemistry.** 3-4-0-X. Prerequisite: Permission of the instructor. An intensive review of analytical chemistry for students with a limited background to enable them to pursue graduate level analytical chemistry courses.

611. **Advanced Analytical Chemistry.** 3-4-0-X. Prerequisite: CHE 411 or permission of instructor. This course consists of sampling techniques, equilibria and activity, chemical and physical separations, and chemical methods of analysis.

612. **Advanced Chemical Analysis.** 3-4-0-F. Prerequisite: CHE 611. Chemical methods of analysis. Topics include complexometric non-aqueous methods as well as kinetic effects and recent advances.

620. **Problems in Biochemistry.** 3-4-0-X. Prerequisite: Permission of the instructor. An intensive review of biochemistry for students with a limited background to enable them to pursue graduate level biochemistry courses.

621. **Advanced Biochemistry.** 3-4-0-F. Prerequisite: Permission of instructor. An in-depth study of the inter-relationships of metabolic pathways with emphasis on control mechanisms.

622. **General Biochemistry.** 3-4-0-F. Prerequisite: CHE 353. An intensive study of modern biochemistry. Topics covered include the biochemistry of proteins, enzymes, lipids, carbohydrates, and nucleic acids.

623. **General Biochemistry II.** 3-4-0-W. Prerequisite: CHE 622. A study of the major metabolic pathways including metabolism of carbohydrates, lipids, amino acids, purines and pyrimidines.

624. **General Biochemistry III.** 3-3-3-S. Prerequisite: CHE 623. Topics covered include molecular biology and biochemistry related to nutrition, hormones, and specialized tissues.

630. **Problems in Inorganic Chemistry.** 3-4-0-X. Prerequisite: Permission of the instructor. An intensive review of inorganic chemistry for students with a

limited background to enable them to pursue graduate level inorganic chemistry courses.

631. **Advanced Inorganic Chemistry.** 3-4-0-S. Prerequisite: CHE 601. Stereochemistry, group theory and related spectroscopy, inorganic polymers, chelates, acid-base concepts, transition metals, lanthanides and actanides.

632. **Inorganic and Organic Preparations.** 2-4 hrs. arr. Prerequisite: Permission of the instructor. Experience in specialized synthetic techniques including inert atmosphere, vacuum line, nonaqueous and large scale preparations.

650. **Problems in Organic Chemistry.** 3-4-0-X. Prerequisite: Permission of the instructor. An intensive review of organic chemistry for students with a limited background to enable them to pursue graduate level organic chemistry courses.

651. **Advanced Organic Chemistry.** 3-4-0-X. Prerequisite: Successful completion of Organic Qualifying Examination or in special instances, permission of the instructor. A study of the structure of organic compounds and its relationship to chemical bonding, stereochemistry, resonance, and reactivity.

652. **Advanced Synthetic Organic Chemistry I.** 3-4-0-X. Prerequisite: CHE 651. An in-depth study of the synthesis of organic compounds emphasizing modern reagents and methods.

653. **Advanced Synthetic Organic Chemistry II.** 3-4-0-X. Prerequisite: CHE 652. An intensive study of reaction pathways. Both ground-state and excited-state (photochemical) processes will be examined.

660. **Problems in Physical Chemistry.** 3-4-0-X. Prerequisite: Permission of the instructor. An intensive review of physical chemistry for students with a limited background to enable them to pursue graduate level physical chemistry courses.

661. **Advanced Physical Chemistry.** 3-4-0-X. Prerequisite: Successful completion of Physical Chemistry Qualifying Examination, or in special instances, permission of the instructor. Covers molecular and thermodynamic basis for chemical phenomena. Emphasis: Applications of thermodynamics and statistical thermodynamics to chemical disciplines.

689. **Seminar.** 1-1-0-Q.

697. **Independent Study and Research.** Hrs. arr. X. Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a thesis and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

698. **Thesis.** 6-0-0-X. Prerequisite: Consultation with and permission of major professor.

700. **Chemical Literature.** 3-4-0-X. Prerequisite: Permission of the instructor. The student learns in detail how to search the literature for information related to his research. Information retrieval methods and general library procedures.

711. **Analytical Spectroscopy.** 3-4-0-X. Prerequisite: CHE 411. Quantitative determinations by I.R., visible, U.V., and x-ray spectroscopy techniques including atomic emission and absorption.

712. **Advanced Chemical Instrumentation.** 3-4-0-X. Prerequisite: Permission of instructor. A study of the chemical, electrical, and physical problems encountered in automatic measurement and control instrumentation.

713. **Analytical Separations.** 3-4-0-X. Prerequisite: CHE 611. Topics include gas, ion exchange, and thin-layer chromatography; precipitation and

crystallization; zone refining and electromigration.

721. **Proteins.** 3-4-0-X. Prerequisite: CHE 622 or permission of instructor. Topics include protein purification, methods of primary, secondary, and tertiary structure determinations, and the relationship between structure and biological activities.

722. **Physical Biochemistry.** 3-4-0-X. Prerequisite: CHE 622. Application of physical-chemical methods to the study of biological macromolecules.

723. **Enzymes.** 3-4-0-X. Prerequisite: CHE 622. Mechanisms of enzyme action, and the kinetics, regulation, and synthesis of enzymes.

731. **Coordination Chemistry.** 3-4-0-X. Prerequisite: CHE 631 and CHE 661. A study of molecular orbital and ligand field treatments of various complexes. Emphasis on electronic vibronic transitions.

733. **Chemistry of the Representative Elements.** 3-4-0-X. Prerequisites: CHE 631 and 661. A survey of the chemistry and bonding properties of the non-metallic elements. Emphasis is on the current literature.

734. **Physical Methods in Inorganic Chemistry.** 3-4-0-X. Prerequisite: CHE 631. An in-depth study of physical tools pertinent to inorganic chemistry and to interpretation of and limits of experimental results.

741. **Nuclear Chemistry.** 3-2-6-X. Prerequisite: Permission of the instructor. Topics: interactions of radiation with matter, nature of radioactivity, radioactive decay, radiation detection, nuclear reactions, tracer applications, etc.

751. **Physical Organic Chemistry.** 3-4-0-X. Prerequisite: CHE 651. Selected topics including application and use of quantum mechanisms, kinetics, cryoscopy, isotopes, etc., to organic chemistry.

752. **Mechanisms of Organic Reactions.** 3-4-0-X. Prerequisite: CHE 651. Mechanisms of organic reactions with emphasis on stereochemistry, kinetics, thermodynamics, and new developments as reported in the chemical literature.

753. **Polymer Chemistry I.** 3-4-0-X. Prerequisite: CHE 653 and permission of instructor. A study of selected polymer systems, polymerization mechanisms, structure-property relationships and methods of evaluation.

754. **Polymer Chemistry II.** 3-4-0-X. Prerequisite: CHE 753. A study of selected polymer systems, polymerization mechanisms, structure-property relationships and methods of evaluation.

761. **Special Topics in Statistical Thermodynamics.** 3-4-0-X. Prerequisite: CHE 661 or permission of the instructor. Statistical mechanical theory and techniques applied to calculations of thermodynamic properties. Topics: Theory of liquids, real gas behavior, etc.

762. **Structural Chemistry.** 3-4-0-X. Prerequisites: CHE 601, 631, and 662. Theoretical examination of vibrational and rotational spectroscopyy, nmr, esr, and diffraction from the standpoint of elementary quantum mechanics and group theory.

763. **Introduction to Quantum Chemistry.** 3-4-0-X. Prerequisite: CHE 661 or permission of instructor. Development of quantum theory relating to energy levels and bonding in chemical systems.

764. **Elements of Diffraction.** 4-4-3-X. Scattering, phase relationships, and structural techniques via diffraction for gases, liquids, solutions, and solids.

789. **Seminar.** 1-1-0-Q.

791. **Research in Chemistry.** Hrs. arr. **X.** Prerequisite: Approval of major instructor.

797. **Independent Study and Research.** Hrs. arr. **X.** Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a dissertation and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

811. **Analytical Electrochemistry.** 3-4-0-X. Prerequisite: Permission of the instructor. The theory of thermodynamics of electrochemistry, theoretical derivations of electrochemical techniques and applications thereof will be presented.

821. **Biosynthetic Pathways.** 3-4-0-X. Prerequisite: Permission of instructor. An in-depth study of selected metabolic pathways.

822. **Nucleic Acid and Protein Synthesis.** 3-4-0-X. Prerequisite: CHE 621 or permission of instructor. An intensive study of protein and nucleic acid biosynthesis, with emphasis on biological control mechanisms.

831. **Organometallic Compounds.** 3-4-0-X. Prerequisites: CHE 631 and CHE 651 or permission of instructor. The preparation, structure, physical properties and chemical reactions of compounds containing carbon-metal and carbon-metalloid bonds.

841. **Radiation Chemistry.** 3-4-0-X. Prerequisite: CHE 561 and permission of the instructor. A study of the interaction of radiation with matter. Topics: radiation dosimetry, ions and excited molecules, ion-molecule reactions, free radicals, etc.

851. **A Survey of Heterocyclic Chemistry.** 3-4-0-X. Prerequisite: CHE 651. Nomenclature, synthesis, and reactions of the more common heterocyclic systems.

861. **Special Topics in Quantum Chemistry.** 3-4-0-X. Prerequisite: CHE 661. This course develops some topic of current interest in quantum chemistry such as magnetic resonance, electron spectroscopy, etc.

862. **Chemical Kinetics.** 3-4-0-X. A study of the experimental techniques of measuring chemical reaction rates and the mathematical treatment of rate data.

863. **Surface Chemistry.** 3-4-0-X. Prerequisite: Permission of instructor. A study of the properties of surface such as catalysis, absorption, ion exchange and electrical phenomena, etc.

898. **Dissertation.**

CHILD DEVELOPMENT (CD-805)

550. **Administration of Preschool Program.** 3-3-3-S. A course in the organizational structure and management of various preschool programs.

551. **Infant Development.** 3-3-3-S. Emphasis will be given to the development and behavior of the infant.

552. **Child Development Methods and Materials.** 3-3-3-W. Provisions are made to evaluate and select materials for use in developing teaching techniques and planning play activities for children.

553. **Creative Activities for the Preschool Child.** 3-3-3-F. A study of creative activities (literature, art, music, nature study, etc.) for preschool children.

554. **Participation Experiences in the Infant Development Center.** 3-0-0-arr. **Q.** Directed participation as an assistant in the Infant Development Center for one quarter.

555. **Supervised Participation.** 4-0-0-arr. **Q.** Directed participation as an assistant in the Nursery School for one quarter.

559. **Symposium in Child Development.** 2-0-0-arr. **X.**

650. **Advanced Child Development.** 3-4-0-**X.** A study of the child through the preschool years investigated in light of personality development theories and current research.

654. **Seminar in Child Development.** 1-4 hrs. arr. **X.**

691. **Research in Child Development.** 1-4 hrs. arr. **X.**

692. **Special Problems in Child Development.** 1-4 hrs. arr. **Q.**

697. **Independent Study and Research.** 1-r hrs. arr. **X.** Not to be counted as credit toward degree. Students who are not in residence but who are actively working on a thesis and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

698. **Thesis.** 6 hrs. arr. **X.** Credit deferred until thesis is completed.

CLOTHING AND TEXTILES (C&T-810)

530. **Textile Testing.** 3-2-2-**S.** Prerequisite: C&T 330 or 334. Testing and evaluating apparel and household textile fabrics by standard ASTM and AATCC methods; application of data to better consumer practices.

531. **Tailoring.** 3-2-2-**W,Su.** Principles and techniques of tailoring applied to a suit or coat.

532. **Textile Economics.** 3-4-0-**F.** Prerequisite: C&T 330 or 334 or the equivalent. A study of problems which affect the consumer in the production, distribution, and consumption of textiles and clothing items.

537. **Apparel Design.** 3-2-2-**W.** Prerequisite: C&T 332, 330 or 334. Development of original designs for apparel items and survey of how the fashion world operates.

630. **Textiles: Recent Developments.** 3-4-0-**F.** Prerequisite: C&T 330 or 334 or equivalent.

633. **Flat Pattern Design.** 3-2-2-**S.** Creative dress design through the principles and application of flat pattern techniques; emphasis on solving figure problems.

635. **Demonstration Techniques and Preparation of Teaching Materials in Clothing and Textiles.** 3-2-2-**X.** Prerequisite: Minimum of 12 credit hours of clothing and 4 credit hours of textiles.

636. **Speed Techniques and Coordinated Pattern Manipulation in Clothing Construction.** 3-2-2-**Su.** Prerequisites: 12 hours undergraduate work in clothing.

637. **Apparel Designing Through Draping.** 3-2-2-**F.** Creative dress design through draping principles and procedures; study of leading designers, their techniques, and places in the market.

691. **Research in Textiles and Clothing.** 1-4 hrs. arr. **Q.**

692. **Special Problems in Clothing and Textiles.** 1-4 hrs. arr. **Q.**

698. **Thesis.** 6 hrs. arr. **X.** Credit deferred until thesis is completed.

COMMUNICATION (COM-208)

507. **Theories of Mass Communication.** 3-4-0-**W.**

510. **Business and Industrial Communication.** 3-4-0-**F.**

600. **Process and Effects of Communication.** 3-4-0-**F.**

605. **Interpersonal Communication.** 3-4-0-**S.**

609. **Communication Seminar.** 3-4-0-**W,Su.**

610. **Problems in Business and Industrial Communication.** 3-4-0-**W.**

691. **Research in Communication.** 1-9 hrs. arr. **F.**

692. **Special Problems.** 3 hrs. arr. **X.**

697. **Independent Study.** No credit. **X.** Not to be counted as credit toward a degree. Students who are not in residence but who are working actively on a thesis and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

698. **Thesis in Public Address or Communication.** 1-6 hrs. arr. **X.**

720. **Introduction to Graduate Research in Communication.** 1-9 hrs. arr. **F.**

721. **Content Analysis of Communication.** 3-4-0-**W.**

747. **Comparative International Communication Systems.** 3-4-0-**Su.**

791. **Research in Communication.** 1-9 hrs. arr. **F.**

792. **Special Problems.** 3 hrs. arr. **X.**

797. **Independent Study and Research.** Hrs. arr. **X.** Not to be counted toward degree. Students who are not in residence but who are actively working on a dissertation and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

809. **Seminar in Communication.** 3-4-0-**W,Su.**

862. **Seminar in Mass Media Control and Ethics.** 3-4-0-**F,** 1974 and alternate years.

898. **Dissertation.**

COMPARATIVE LITERATURE (CLT-230)

691. **Research.** 3-4-0-**Q.** May be taken for a total of nine hours.

692. **Special Problems.** 2-6 hrs. arr. **Q.**

697. **Independent Study and Research.** Hrs. arr. **X.** Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a thesis and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

698. **Thesis.** 1-6 hrs. arr. **X.**

701. **Introduction to Comparative Literature.** 3-4-0-**W.**

750. **Comparatist History of World Literature.** 3-4-0-**S.** May be taken for a total of twelve hours of credit when topics vary.

760. **Principles of Comparatist Interpretation.** 3-4-0-**Su.** May be taken for a total of twelve hours of credit when topics vary.

791. **Research in Comparative Literature.** 1-12 hrs. arr. **X.**

792. **Special Problems.** 2-6 hrs. arr. **Q.**

797. **Independent Study and Research.** Hrs. arr. **X.** Not to be counted as credit

toward a degree. Students who are not in residence but who are actively working on a dissertation and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

898. **Dissertation.**

COMPUTER SCIENCE AND STATISTICS (CSS-330)

515. **Methods of Mathematical Statistics I.** 3-4-0-W,S. Prerequisite: Permission of instructor. Continuous and discrete distributions, t-test, Chi-square test and analysis of variance.

516. **Methods of Mathematical Statistics II.** 3-4-0-S,Su. Prerequisite: CSS 515. Orthogonal polynomial contrasts, multi-way classification anova, simple and multiple linear regression, polynomial regression.

517. **Experimental Design.** 3-4-0-Su. Prerequisite: CSS 516. Factorials, randomized blocks, split-plot, fractional factorials and confounding.

518. **Sampling Methods.** 3-4-0-X. Prerequisite: CSS 516. The planning, execution and evaluation of sample surveys. Simple random sampling, stratified random sampling, cluster sampling.

541. **Programming Languages.** 4-4-1-W,Su. Prerequisite: Experience in coding. A study of the essential characteristics of programming languages.

570. **Digital Systems I.** 3-4-0-F,S. Prerequisite: Permission of instructor. Symbolic logic, Boolean algebra for descriptions and analysis of switching circuits, basic sequential circuits.

571. **Digital Systems II.** 3-4-0-W,Su. Prerequisite: CSS 570. A study of control units, arithmetic units, memories and microprogramming concepts.

576. **Introduction to Analog Computers.** 3-4-1-W. Prerequisite: MAT 405 or CSS 323. Design and testing of basic analog circuits.

577. **Process Control Systems.** 3-4-0-X. Prerequisite: CSS 576. Use of the analog computer to solve engineering problems; process control systems.

635. **Statistical Simulation and Modeling.** 3-4-0-F. Prerequisite: MAT 379. Formulation of models and the design of simulation programs. Simulation languages such as SIMSCRIPT, DYNAMO, GPSS, GASP, GPDS.

636. **Stochastic Processes and Queuing Theory.** 3-4-0-W. Prerequisite: MAT 405. Poisson process, Markov processes and Queuing theory.

637. **Least Squares Techniques.** 3-4-0-S. Regression analysis, curvilinear regression, experimental design models.

COUNSELING AND GUIDANCE (CGE-140)

522. **Curriculum Development for Career Education.** 3-4-0-X.

523. **Methods and Techniques of Group Guidance.** 3-3-2-F,S.

532. **Introduction to Community Resources.** 3-3-2-F,S. Prerequisite: Consent of instructor.

610. **Foundations, Organization, and Administration of Secondary Guidance.** 3-4-0-F,Su.

611. **The Information Service.** 3-4-1-F,S.

612. **Methods and Techniques of Counseling.** 3-3-2-Q.

613. **Use and Interpretation of Tests.** 3-4-1-X.

614. **Analysis of the Individual.** 3-4-1-Q. Prerequisite: RED 601, 602, or equivalent.

640. **Student Personnel Work in Higher Education.** 3-4-0-F,S.

650. **Foundations, Organization, and Administration of Elementary Guidance.** 3-4-0-Su.

692. **Special Problems I, II, III.** 1-3 hrs. arr. Q. By prior arrangement only.

694. **Field Problems I, II, III.** 1-3 hrs. arr. Q. By prior arrangement only.

696. **Supervised Practicum I, II.** 3-1-12-Q. Prerequisite: CGE 760 and prior arrangement with instructor.

697. **Independent Study and Research.** 3 hrs. arr. X. Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a thesis and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

698. **Thesis.** 6 hrs. arr. X. Credit deferred until thesis is completed.

710. **Group Counseling.** 3-3-2-W,Su.

711. **Methods and Techniques of Consultation.** 3-3-2-F,S.

712. **Advanced Testing.** 3-3-2-X.

713. **Readings.** 3 hrs. arr. Q.

730. **Introduction to Community and Rehabilitation Counseling.** 3-4-0-F,S.

732. **Marriage and Family Counseling.** 3-4-1-W,Su.

733. **Case Management Processes.** 3-3-2-X.

734. **Socio-Psychological Aspects of Disability.** 3-4-0-X.

735. **Medical Aspects of Rehabilitation.** 3-4-0-X.

736. **Seminar in Community Counseling.** 3-4-0-W,Su.

737. **Pastoral Counseling Seminar.** 3-4-0-F,S.

738. **Alcoholism and Drug Abuse Seminar.** 3-4-0-W,Su.

740. **Seminar in Student Personnel Problems.** 3-4-0-W,Su.

760. **Counseling Laboratory I.** 3-3-3-Q. Prerequisites: CGE 612 and 614 or equivalent and prior arrangement with instructor.

762. **Counseling Laboratory II.** 3-3-3-Q. Prerequisites: CGE 760 and prior arrangement with instructor.

763. **Group Counseling Laboratory.** 3-3-3-Q. Prerequisites: CGE 523 or 710 and consent of instructor.

791. **Research in Counseling and Guidance.** 1-9 hrs. arr. Q.

792. **Special Problems.** 3 hrs. arr. Q.

797. **Independent Study and Research.** 3 hrs. arr. X. Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a dissertation and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

798. **Research Problems.** 3 hrs. arr. Q.

810. **Doctoral Integrative Seminar.** 1-1-0-Q.

811. **Seminar in Systems of Counseling.** 3-4-0-F,S. Prerequisites: CGE 612 and consent of instructor.

840. **Testing in Higher Education.** 3-4-1-X. Prerequisite: CGE 614 or equivalent course.

841. **Administration and Organization of Student Personnel Services.** 3-4-0-W.

850. **Advanced Research Seminar.** 3-3-2-S.

860. **Counseling Laboratory III.** 3-3-3-W,Su. Prerequisites: CGE 762 and prior arrangement with instructor.

861. **Internship I, II, III.** 3-9 hrs. arr. Q. By prior arrangement only.

870. **Seminar in Counselor Education and Supervision.** 3-3-2-W.

898. **Dissertation.**

CRIMINAL JUSTICE STUDIES (CJ-281)

503. **Criminal Law II.** 3-4-0-W,S. A survey of procedural criminal law. Due Process, Statute of Limitation, Venue and Double Jeopardy are covered.

504. **Evidence, Search and Seizure.** 3-4-0-F,S. An examination of the laws of evidence and the procedures for obtaining it.

506. **Administration of Criminal Corrections.** 3-4-0-W. An in-depth study of administration of the correctional system. To include: management, the incarceration process, probation and parole.

507. **Juvenile Justice System.** 3-4-0-F,W. A study of police in delinquency prevention, investigation of juvenile crime, disposition of offenders, and juvenile courts.

508. **Problems in Criminal Justice.** 3-4-0-F,S. A seminar course dealing with all aspects of the criminal justice system, tying together the knowledge of criminal justice previously learned.

509. **Law of Criminal Corrections.** 3-4-0-W. A study of the newly emerging rights of individuals at detention, arrest, and incarceration.

601. **Seminar in Civil Rights and Criminal Justice.** 3-4-0-S. A study of the legal and moral responsibility of the criminal justice system to individual rights.

602. **Seminar in Criminal Justice Planning and Research.** 3-4-0-X. A study of criminal justice planning methodology and research requirements.

603. **Seminar in Industrial Security.** 3-4-0-X. A study of causation, prevention, and control of business and industrial theft.

610. **Civil Law and Criminal Justice.** 3-4-0-S. Examination of the relationship between selected areas of civil law and criminal justice agencies.

692. **Special Problems.** 1-3 hrs. arr. Q.

ECONOMICS (ECO-610)

501. **Public Finance.** 3-4-0-W,Su. Prerequisite: ECO 255-256. A study of federal and state spending and fund raising policies within the context of the social goals to be accomplished by such policies.

522. **Economics of Public Utilities.** 3-4-0-S. Prerequisite: ECO 255-256. A study of the development, institutional bases, and regulation of public utilities.

524. **Economics of Urban Areas.** 3-4-0-S. Prerequisite: ECO 255-256. A study of

current problems of the cities — race, poverty, pollution, unemployment, crime, and government finance.

535. **International Trade Theory.** 3-4-0-F. Prerequisite: ECO 255-256. A study of the historical development of international trade theory, the importance of international trade, the mechanism of international payments and modern theories dealing with the subject.

540. **Economic Development.** 3-4-0-S. Prerequisite: ECO 255-256. A study of the nature, causes and effects of regional and national economic development.

570. **Comparative Economic Systems.** 3-4-0-F,S. Prerequisite: ECO 255-256. A course designed to acquaint the student with origins, development and characteristics of facism, communism, and capitalism.

580. **Environmental Economics.** 3-4-0-W. Prerequisite: ECO 255-256 or consent of instructor. A survey of economic concepts relevant to decision making with reference to the management of natural resources heretofore considered to be "free" in nature.

600. **Microeconomic Theory.** 3-4-0-F. Prerequisite: ECO 340. An advanced study of the theory of price determination and resource allocation.

605. **Macroeconomic Theory.** 3-4-0-W. Prerequisite: ECO 345. An advanced study of the theories of income and employment, general equilibrium, and growth.

610. **Monetary Theory.** 3-4-0-S. Prerequisite: ECO 330. An advanced study of the determination of the level of prices and of alternate monetary and fiscal policies in the light of social goals.

620. **Statistics for Quantitative Analysis.** 3-4-0-W. Prerequisites: ECO 301 and 302 or equivalent. A study of classical statistical methods and Bayesian theory and their application for modern business problems.

625. **Managerial Economics.** 3-4-0-F,W,Su. An advanced study involving theory and actual cases in the application of economic analysis to the solutions of business problems.

630. **History of Economic Thought I.** 3-4-0-S. A study of the development of economic theories from Aristotle through the critics of the classical tradition.

631. **History of Economic Thought II.** 3-4-0-F. A study of economic doctrines from the marginal revolution to Keynes. (Non-economic majors are advised to take Economics 631 rather than 630.)

650. **Problems in Political Economy.** 3-4-0-X. Prerequisite: Consent of instructor.

665. **Advanced Labor Economics.** 3-4-0-X. Prerequisite: ECO 465 or consent of instructor. An advanced study of wage and employment theory, unionism, and current labor force problems.

670. **Theory of Economic Systems.** 3-4-0-X. Prerequisites: Principles of Economics and permission of department chairman. A study of the theories underlying the different economic systems. This course may not be taken for credit by the student who has had comparative economic systems at the undergraduate level.

692. **Special Problems.** 3-4-0-Q.

697. **Independent Study and Research.** Hrs. arr. X. Not to be counted as credit toward a degree. Students who are not in residence but are actively working on a thesis and consulting with the major professor or making use of the library or

other University facilities must enroll in this course.

698. **Thesis.** 6 hrs. arr. **X.**

EDUCATIONAL ADMINISTRATION (AED-130)

600. **Basic Course in Educational Administration.** 3-4-0-**Q.** The introductory course for teachers and prospective administrators provides an overview of administrative roles in education.

602. **Organization and Administration of Adult Education.** 3-4-0-**W,Su.** Includes the design, implementation, and financing of programs for adults.

604. **Administration of Media Programs.** 3-4-0-**W,Su.** Considers problems in management of the media program. Emphasis on organization, staffing and financing media services, and use of evaluation standards.

620. **Supervision of Instruction.** 3-4-0-**Q.** A practical course in supervision for prospective school principals and supervisors of instruction. Deals with principles and procedures of supervision.

622. **Supervision and Curriculum in Reading.** 3-4-0-**S,Su.** The role of reading supervisors and school administrators in developing and implementing programs for improvement of reading instruction in the schools.

630. **The Elementary School Principal.** 3-4-0-**F,Su.** A study emphasing administrative problems and professional leadership in the elementary school.

632. **Organization and Administration of the Junior High School.** 3-4-0-**W.** Examines the Junior High-Middle School function, objectives and program from the viewpoint of the administrator and supervisor.

634. **Secondary School Administration.** 3-4-0-**S.** The study of practical problems encountered by high school principals in: scheduling, attendance, discipline, office management, and the selection and supervision of staff.

650. **School Business Management.** 3-4-0-**W,S,Su.** A practical course in the overall aspects of present day school business administration.

692. **Special Problems I, II, III.** 1-3 hrs. arr. **Q.** A problem study to develop knowledge and facility in a field of interest for the student which requires preparation of a scholarly paper under the supervision of a graduate professor.

694. **Field Problems in Production I and II.** 3-0-0-arr. **Q.** Opportunity to study local school problems under careful supervision of a graduate professor.

697. **Independent Study.** 1-9 hrs. arr. **X.** No credit. Students who are not in residence but are actively working on a thesis and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

698. **Thesis.** 6 hrs. arr. **X.** Credit deferred until thesis is completed.

700. **Public School Finance.** 3-4-0-**W,Su.** Emphasizes principles of taxation; local, state, and federal financing of public education; equalization of educational opportunity.

704. **School Community Relations.** 3-4-0-**F,W,Su.** A study of school community relations purposes, principles, policies and procedures.

706. **Administration of School Buildings and Grounds.** 3-4-0-**W,Su.** A comprehensive study of the administrative function in facilities construction, renovation, planning, operation and maintenance.

708. **Administration of School Personnel.** 3-4-0-F,S. Stresses administrative relationships involved in developing satisfactory personnel policies, techniques, and regulations.

710. **School Law.** 3-4-0-Su. Legal aspects of such factors as school money, church-state relationships, injury to pupils, student and teacher rights and related matters.

711. **Higher Education in the United States.** 3-4-0-W,Su. This course provides an overview of the development, scope, philosophy, objectives, and recent innovations in colleges and universities.

712. **The Junior College.** 3-4-0-F. This course treats the development, functions, programs, philosophy, issues, and research related to the junior college.

713. **Curricula in Higher Education.** 3-4-0-F. A study of undergraduate, graduate and professional education curriculum development in junior and senior colleges.

715. **Administration and Supervision of College Teachers.** 3-4-0-Su. A study of the administration of college faculty personnel services and of techniques for faculty development.

717. **Continuing Education and Community Service.** 3-4-0-W,S,Su. The role and scope of continuing education and community service in higher education, including the community college.

719. **Organization and Administration of Occupational Education in the Community College.** 3-4-0-W. Economic, social, educational and legal bases for occupational education; administration of secondary and community college programs.

720. **Advanced Curriculum Development.** 3-4-0-F,S. Designed for the school administrator who has or will have responsibility for curriculum development in a school system.

736. **Practicum in Educational Administration.** 3-4-0-W,Su. Seminar experiences in administrative problems from the standpoint of the chief school officer and the central office staff.

738. **Practicum in Supervision.** 3-4-0-F,S. Prerequisite: AED 620. An advanced seminar in supervisory services and current problems from a central office viewpoint.

750. **Administrative Workshop I, II, III and V.** One and one-half hours per week. (Course may be repeated, with only nine hours counting toward a degree.) Su.

755. **Problems of the County Superintendent.** 3-4-0-W. A course designed for county superintendents in which they study their problems under the direction of a graduate professor.

791. **Research in Educational Administration, Supervision, and Curriculum.** 1-9 hrs. Prerequisite: Approval of the major professor.

792. **Special Problems.** 3-0-0-Q.

794. **Field Problems in Administration I, II, III.** 1 hr. arr. X. A project dealing with a specific problem in school administration. An on-the-job training program with the work being done under the supervision of a graduate professor. This registration must be approved by the departmental chairman upon the recommendation of the student's major professor.

797. **Independent Study and Research.** 1-9 hrs. arr. **X.** Not to be counted as credit toward a degree. Students not in residence but actively working on a dissertation and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

798. **Research Problems.** 3 hrs. arr. **X.** Selection of practical educational problems for solution by candidates for the specialists degree, using research and professional knowledge. A scholarly report is required.

800. **Advanced School Administration and Supervision.** 3-4-0-**F,S.** This course deals with the theories and concepts underlying present day school organization, administration, and supervision.

814. **Organization and Administration of Higher Education.** 3-4-0-**W.** A study of organizational and administrative roles of structure, governance, coordination, control and finance of higher education.

816. **Seminar in Problems of Higher Education.** 3-4-0-**S.** Discussion of problems and topics in higher education to be determined by the students and the instructor.

889. **Special Topics Seminar.** 1-4-0-**Q.** (Max. 3 hrs.) A seminar for in-residence doctoral students in educational administration, emphasizing current issues selected by students in consultation with faculty.

898. **Dissertation.**

EDUCATIONAL FOUNDATIONS (CIF-125)

590. **Classroom Use of Instructional Television.** 3-3-2-**W,Su.** Workshop in the utilization of Mississippi's state program of instructional television for elementary teachers, media directors, curriculum supervisors, and administrators.

604. **Foundations in American Education.** 3-4-0-**Q.** A brief survey of the philosophical, psychological, sociological, and historial foundations of American education.

607. **Basic Course in Curriculum Development.** 3-4-0-**Q.** An examination of factors influencing curricular planning and procedures for structuring and evaluating curricular experiences.

619. **Utilization, Selection, and Preparation of Audiovisual Materials.** 3-4-0-**W,S,Su.** Emphasis on principles and procedures for selecting, utilizing, and preparing audiovisual materials and appropriate use of each.

620. **Foundations of Educational Technology.** 3-4-0-**W.** Uses of research findings in the development of technology. Development of instructional specifications for educational products.

632. **Measuring Results in Education.** 3-4-0-**F,S,Su.** Emphasis on selecting and constructing various types of achievement test and statistical interpretation of data.

644. **Instructional Development I.** 3-4-0-**F.** Prerequisite: CIF 619 or permission of the instructor. Survey of various Instructional Development models for the development, revision, or revitalization of educational programs.

645. **Computers in Education.** 3-3-2-**X.** Applications of computer technology to instructional, information, and administrative programs.

660. Economic **Education for Teachers.** 3-4-0-Su. Emphasis on in-depth understanding of our economic system and integration of economic concepts into the social studies.

680. **Direction and Supervision of Student Teaching.** 3-4-0-Su. Designed to guide supervising teachers in orienting and involving student teachers.

701. **Analysis of Teaching Behavior.** 3-4-0-X. Designed to analyze teacher behavior to determine competency including interaction analysis and microteaching skills.

709. **Social Foundations of Education.** 3-4-0-Su. A study of contrasting motivations and values of various cultural groups and their implications for education.

735. **Advanced Production Techniques.** 3-4-0-F. Theories and practices involved in producing basic types of audiovisual materials and planning, shooting, and editing picture stories.

736. **Designing Educational Systems.** 3-4-0-X. Translation of instructional specifications into prototype systems with emphasis upon individualized systems of instruction.

740. **Programmed Instruction.** 3-4-0-F,Su. Theories and techniques in designing, producing and evaluating programmed instructional materials.

741. **Instructional Graphics.** 3-4-0-W. Laboratory practice in skills required in the production of various visual media for media centers in public schools.

742. **Research in Instructional Systems Technology.** 3 hrs. arr. Q. Research in problems of formulating objectives, analyzing audiences, using media, and evaluating educational outcomes.

743. **Educational Television Production.** 3-4-0-S. To provide media specialists with knowledge and skills required in supervising and producing instructional television programs.

798. **Research Problem.** 3 hrs. arr. Q. A field study or thesis type research study representing the major research component of the specialist's degree.

816. **History of Public Education in the United States.** 3-4-0-F,S. A critical study of the evolution of public education with emphasis on critical issues.

818. **Comparative Philosophies of Education.** 3-4-0-W,Su. A critical examination of theoretical concepts of leading modern philosophies and their implications for education.

EDUCATIONAL PSYCHOLOGY (EPY-180)

576. **Learning in Adult Education.** 3-4-0-Q. A study of learning in adulthood, and related to a range of educational programs.

582. **Contemporary Problems in Educational Pyschology.** 3-4-0-X. Prerequisites: PSY 110 and permission of the instructor. Theory and research on selected contemporary topics in educational psychology. May be taken up to nine hours with change of content.

691. **Research in Educational Psychology.** 1-9 hr. arr. X.

697. **Independent Study and Research.** 3 hr. arr. X. Not to be counted toward a

degree. Students not in residence but actively working on a thesis and using University facilities must enroll in this course.

698. **Thesis.** 6 hrs. arr. **Q.**

710. **Seminar in Teaching of Psychology.** 1-2-0-**X.** An analysis of the psycho-educational problems involved in the under-graduate and graduate teaching of psychology.

712. **Practicum in Teaching Psychology.** 3-1-4-**X.** Supervised teaching of courses in psychology.

720. **Learning and Motivation I.** 3-4-0-**W.** Consideration of the basic concepts, problems, and research methodology in the studying of learning and motivation.

721. **Learning and Motivation II.** 3-4-0-**S.** An intensive study of the role of contemporary theories of learning and motivation in current research.

722. **Brain Damage and Behavior.** 3-4-0-**X.** Prerequisite: Permission of the instructor. The numerous causes of brain injury are studied and their effect on the mental and physical behavior of man are considered.

731. **Community Mental Health.** 3-4-0-**Su.** Prerequisite: Permission of the instructor. Concepts and techniques of mental health consultation with emphasis on the psychologist's role in the field of mental health.

732. **Psychology of Mental Retardation.** 3-4-0-**F.** Prerequisite: Permission of the instructor. Study of personality development, problems of adjustment, and abnormal behavior of the mentally retarded.

740. **Advanced Educational Psychology.** 3-4-0-**F,S,Su.** Designed primarily for the graduate student wishing to broaden his knowledge in the field of psychology of learning.

742. **Learning and Instruction in Higher Education.** 3-4-0-**W,Su.** A study of the application of learning principles and instructional techniques in higher education.

745. **Psychology of the Gifted Child.** 3-4-0-**X.** Prerequisite: Permission of the instructor. Study of the characteristics and needs of gifted children and the various means employed by the schools to provide for these children.

746. **Social Processes in Classroom Learning.** 3-4-0-**W,Su.** Pupil-teacher interaction; instruction in developing goals, changing attitudes, resolving conflicts, and enhancing the individual's sense of worth.

750. **Leadership.** 3-4-0-**X.** Prerequisite: Permission of the instructor. Study of the factors affecting leadership in a school or industrial setting; emphasis is placed on status and esteem as factors.

751. **Advanced Social Psychology.** 3-4-0-**X.** A study of theory, research, and practice related to group processes and their interaction with individual behavior.

755. **Group Dynamics.** 3-4-0-**Su.** Prerequisite: EPY 750 or permission of the instructor. A study of theory and practice in group development and group dynamics.

760. **Intelligence: Theories and Development.** 3-4-0-**W.** Nature of intelligence, and its development; critical evaluation of methods of measurement; relation of intelligence to social efficiency.

762. **Interpretation of Psychological Tests for Exceptional Children.** 3-4-0-**X.** Prerequisite: Permission of the instructor. A study of the various psychological tests used in the appraisal and evaluation of exceptional children.

772. **Case Studies in School Psychology Problems.** 3-1-6-**S.** Studies of clinical,

school, and other psychological problems encountered by the school psychologist; writing and presenting case material.

774. **Advanced Child Psychology.** 3-4-0-**W,Su.** Mental, motor, social, and emotional development of children of elementary school age. The application of developmental psychology to education and guidance.

775. **Advanced Adolescent Psychology.** 3-4-0-**F,S.** Advanced study of the adolescent and his needs in the home, school, and community. Survey of the research and literature on the period of adolescence.

783. **Seminar in Psychological Services in Schools I, II, III.** 1-2-0-**Q.** Limit of 3 semester hours. Advanced general psychology with special emphasis on relationships of each topic to the areas of school psychology, education of the handicapped, etc.

784. **Practicum in School Psychology.** 3-1-6-**Q.** Application of clinical procedure of testing, interviewing, therapy, and consultation in a school setting under supervision.

791. **Research in Educational Psychology.** 1-9 hrs. arr. **X.** Prerequisite: Approval of the major professor.

792. **Special Problems.** 1-3 hrs. arr. **X.**

796. **Internship in School Psychology.** 3 hrs. arr. **Q.** Full-time practice of school psychology under on-site supervision in an educational setting.

797. **Independent Study and Research.** 3 hrs. arr. **X.** Not to be counted as credit towards a degree. Students not in residence but actively working on a dissertation and using University facilities must enroll in this course.

898. **Dissertation.** 3 hrs. arr. **X.**

EDUCATIONAL RESEARCH (RED-135)

601. **Research: Its Introduction and Methodology.** 3-4-0-**Q.** Methods of scientific inquiry, selection of a research topic, principles of reporting research, and functional statistical concepts.

602. **Introduction to Educational Statistics.** 3-3-1-**Q.** Basic concepts and computations in descriptive statistics. Introduction to sampling procedures and inferential processes in educational research.

712. **Computer Applications in Educational Research.** 3-2-2-**X.** Prerequisites: RED 752, 753. Skills development course in the computer analysis of behavioral science data, systems analysis, financial and personnel accounting procedures.

718. **Practicum in Educational Research.** 3-3-1-**X.** Prerequisites: RED 752, 753. Application of appropriate research models, structure of research reports, critique of published research and of student's research problem.

720. **Measurement in Educational Research.** 3-4-0-**X.** Prerequisites: RED 752, 753. Survey of the theory of measurement including true score theory, reliability, validity, item analysis and item selection techniques.

752. **Educational Research: Correlational Statistical Methods.** 3-3-1-**Q.** Prerequisite: RED 602 or permission of instructor. Correlation and regression theory. Techniques associated with bivariate, partial and multiple correlation and applied multiple linear regression.

753. **Educational Research: Significance Tests and Statistical Methods for Experimental Design.** 3-3-1-**Q.** Prerequisite: RED 752. Probability theory and theoretical distributions in experimental design. Techniques including tests, simple and complex analysis of variance, analysis of co-variance.

791. **Field Problems in Educational Research.** 1-12 hrs. arr. **X.** Prerequisite: Approval of major professor and Educational Research Staff.

792. **Special Problems in Educational Research I, II, III.** 1 hr. each. Arr. **Q.** Prerequisite: Approval of major professor and Educational Research Staff. Application of specific research procedures in the development of skills in various types of research. The preparation of a scholarly paper is required.

793. **Advanced Educational Research.** 3-3-1-**Q.** Seminar in types and problems of Educational Research, observation and data collection methods, and standards of reporting educational research.

798. **Research Problem.** 3 hrs. arr. **Q.** Selection and development of a practical educational research problem for the specialist's degree. A scholarly research paper is required.

824. **Research Design in Educational Research.** 3-3-1-**W.** Prerequisites: RED 752, 753. Experimental and quasi experimental designs in educational research. Emphasis upon utilization of design principle and appropriate statistical treatment.

830. **Multivariate Analysis in Educational Research.** 3-3-1-**S** and arr. Prerequisites: RED 752, 753. Theory and application of multiple regression and discriminant analysis, canonical correlation, multivariate analysis of variance and co-variance.

ELEMENTARY EDUCATION (CIE-115)

503. **Kindergarten-Primary Education.** 3-4-0-**Q.** A practicum designed to give teaching experiences in understanding the social, emotional, and cognitive growth and development of children.

512. **Diagnosis and Remediation of Reading Disability for the Classroom Teacher.** 3-4-0-**Q.** Prerequisites: CIE 306, 309 and 311 or 312. Provides relevant practicum experiences in evaluation and gives extended opportunities in child tutoring appropriate to grades 2-8.

590. **Workshop in Aviation Education.** 3-0-0-**Su.** Designed to familiarize teachers and administrators with the role that aviation and space exploration play in developing the school curriculum. May be taken twice for a total of six hours.

591. **The Reading Conference.** 1-0-0-**Su.** An intensive three-day summer quarter program consisting of lectures, group discussions and demonstration lessons. May be taken three times.

594. **Workshop in Learning Resources in Early Childhood Education.** 3-0-0-**Su.** Students will become acquainted with learning sources, selection, use, and production of multimedia materials for kindergarten and primary education.

691. **Research in Reading.** 1-9 hrs. arr. **X.** Provides students with the opportunity to develop a proposal for a research project and/or to conduct a reading

project under the direction of a graduate professor in a form suitable for publication.

692. **Special Problems I, II, III.** 1-0-0-X. A problem study to be approved by the department chairman to develop knowledge and facility in a field of interest of the student. Preparation of a scholarly paper is required.

694. **Field Problems in Production I, II.** 3-0-0-X. Prerequisite: Approval of the department chairman. This course provides students with an opportunity to study local school problems in a field setting under the supervision of a graduate professor.

697. **Independent Study and Research.** 1-9 hrs. arr. X. Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a thesis and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

698. **Thesis.** 6-0-0-X. Credit deferred until thesis is completed.

704. **Reading for Different Cultural Groups.** 3-4-0-Su. Reviews the research relating to the culturally different, specifically relating to characteristic differences and effective teaching materials and methodologies.

705. **Modern Concepts in Reading Skill Development.** 3-4-0-F,Su. An intensive development of the skills required in classroom reading emphasizing methods and materials required to teach the skills.

706. **Psychology of Reading.** 3-4-0-F,Su. Considers the components of the reading process, with emphasis on language and reading; approached from a theoretical point of view.

713. **Advanced Diagnosis and Remediation of Reading Disability for the Classroom Teacher.** 3-4-0-W,Su. Prerequisite: CIE 706. Deals with corrective and remedial reading in the elementary school covering causes of disability, procedures in diagnosis, and classroom remedial treatment.

715. **Advanced Diagnosis and Remediation of Reading Disability for the Reading Specialist.** 3-4-0-X. Prerequisite: CIE 706. Deals with the role of the reading specialist, reading clinic organization, diagnostic remedial materials and techniques, with limited testing-teaching and clinical observation experiences.

717. **Professional Relationship in Improved Elementary Programs.** 3-4-0-X. A course designed to investigate behavioral factors of individuals and groups as they affect and improve elementary school environments.

720. **Internship in Reading: Public School.** 3-6 hrs. arr. X. The student is assigned to a public school in a teaching or supervisory capacity under the direct supervision of a reading faculty member in order to develop competency in instruction, administration or clinical skills.

721. **Practicum in Remedial Reading for the Reading Specialist.** 3-4-0-X. Prerequisite: CIE 715. Provides supervisory experience in diagnosis in prescribing materials for remediation and in directing remedial reading procedures for small groups of reading disability cases.

724. **Problems of Teaching Arithmetic.** 3-4-0-S. Prerequisite: MAT 310 or consent of instructor. A study of elementary school techniques, particularly those related to number concept, of teaching arithmetic based on research studies and current practices.

725. **Social Studies Education in Elementary School.** 3-4-0-W,Su. A course

which deals with programs, practices, trends, and investigation of criteria for evaluating, planning, organizing, and improving social studies programs.

726. **The Development of the Latin American Countries.** 3-4-0-Su. A seminar which deals with the historical, political, social, and economic development of the Latin American region.

728. **Curriculum Problems in the Elementary School.** 3-4-0-S,Su. A course involving analysis and evaluation of curriculum elements and procedures in terms of the implications for the individual, the school, and the community.

729. **Reading in the Elementary School.** 3-4-0-F,S,Su. Provides for extensive study of recent trends in materials and methods in reading in the elementary school including significant related research studies.

733. **Practicum in Diagnosis and Remediation of Reading Disability for the Classroom Teacher.** 3-3-4-Q. Prerequisite: CIE 713. Develops the skills necessary in making a complete reading diagnosis including evaluations, interpretations, and recommendations.

736. **Practicum in Reading Diagnosis.** 3-4-0-Q. Prerequisite: CIE 713. Enables the student to work with small groups of corrective reading cases diagnosing needs and teaching corrective lessons.

762. **Research in Elementary Education.** 3-4-0-X. Prerequisite: Advanced graduate status or permission of chairman of department. Designed to familiarize the student with the elements and methods of research, with the representative types of research, and with the major contributions of research to the field of elementary education.

770. **Practicum in Early Childhood Education.** 3-4-0-Q. Curriculum planning, administration, and supervision are stressed through research and practice in laboratory settings.

772. **Practicum with Parents.** 3-4-0-W. Parent-teacher-child intrapersonal and interpersonal relationships are investigated through research and practice in laboratory setting.

776. **Seminar in Early Childhood Education.** 3-4-0-W,Su. Emphasis is on early childhood practice, theory, and research and their relatedness to psychological, sociological, physiological, and intellectual patterns.

777. **Evaluation in Early Childhood Education.** 3-4-0-F,S. An introduction to specific principles and practices relative to group and individual evaluation procedures for early childhood education.

778. **Creative and Mental Growth.** 3-4-0-S,Su. Research in creative thinking and its relationship to mental growth is emphasized.

780. **Research in Child Development.** 3-4-0-W,Su. A course concerning methods and research in child growth in social, emotional, psychological, and physiological development.

782. **History and Philosophy of Early Childhood Education.** 3-4-0-F. An investigation of Pestalozzi, Froebel, Montessori, and others representing philosophies influencing today's curricula and programs.

785. **Seminar in Reading Instruction.** 3-4-0-S. Prerequisites: CIE 705, CIE 706, CIE 729. Considers topics pertinent to current research in reading instruction. Topics announced in advance of registration.

791. **Research in Elementary Education.** 1-9 hrs. arr. **X.** Prerequisite: Approval of the major professor.

792. **Special Problems.** 3-0-0-**X.**

797. **Independent Study and Research.** 1-9 hrs. arr. **X.** Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a research problem or a dissertation and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

798. **Research Problem.** 3-0-0-**X.** Specialist's degree candidates are required to select a significant educational problem for investigation and to present the findings in a scholarly report under the guidance of a graduate committee.

862. **Seminar in Elementary Education. 3-4-0-W,Su.** Prerequisite: Advanced graduate status or permission of the chairman of the department. A course which is interdisciplinary in nature and focuses upon contributions of research, philosophy, history, sociology, and educational psychology as it applies to the resolution of major issues in elementary education.

898. **Dissertation.**

ENGLISH (ENG-224)

500. **Introduction to Linguistics.** 3-4-0-**F.**

501. **Advanced Grammar.** 3-4-0-**Q.**

502. **English Syntax.** 3-4-0-**W.**

506. **History of the English Language.** 3-4-0-**W,Su.**

509. **Studies in Linguistics.** 3-4-0-**S.** May be repeated as topic varies to a total of six hours.

510. **Readings in World Literature I.** 3-4-0-**F.**

511. **Readings in World Literature II.** 3-4-0-**W.**

513. **The Modern European Novel.** 3-4-0-**W.**

517. **Modern Drama.** 3-4-0-**S.**

519. **Studies in Comparative Literature.** 3-4-0-**Su.** May be repeated as topic varies to a total of six hours.

521. **Short Story Writing.** 3-4-0-**W,Su.**

522. **Poetry Writing.** 3-4-0-**F,S.**

524. **Traditions and Forms.** 3-4-0-**F.**

551. **Chaucer.** 3-4-0-**S.**

552. **Medieval English Literature.** 3-4-0-**F.**, 1975.

554. **Shakespeare's Comedies and Tragicomedies.** 3-4-0-**F,Su.**

555. **Shakespeare's Histories and Tragedies.** 3-4-0-**F,S.**

556. **Sixteenth Century British Literature.** 3-4-0-**F.**

558. **Seventeenth Century Prose and Poetry.** 3-4-0-**W.**

559. **Milton.** 3-4-0-**W.**

561. **Major Writers of the Eighteenth Century.** 3-4-0-**S.**

563. **The British Novel.** 3-4-0-**W,Su.**

565. **Nineteenth Century British Literature: Romantic.** 3-4-0-**F.**

566. **Nineteenth Century British Literature: Victorian.** 3-4-0-**S.**

567. **Twentieth Century British Literature.** 3-4-0-W, 1975-1976.
568. **Modern British Poetry.** 3-4-0-W, 1975-1976.
569. **Studies in British Literature.** 3-4-0-W,Su.
570. **The American Literary Renaissance, 1820-1870.** 3-4-0-F.
571. **The Rise of Realism in American Literature, 1870-1920.** 3-4-0-S.
572. **American Drama.** 3-4-0-S.
577. **The American Novel, 1920-1960.** 3-4-0-W.
578. **Modern American Poetry.** 3-4-0-F,Su.
585. **Literature of the South.** 3-4-0-W.
589. **Studies in American Literature.** 3-4-0-F,S.
692. **Special Problems.** 3 hrs. arr. Q.

695. **Advanced English Pedagogy.** 3-4-0-Su, 1974. An analysis of recent theories and practices in the teaching of composition, literature, and language in post-elementary institutions.

697. **Independent Study and Research.** Hrs. arr. Q. Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a thesis and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

698. **Thesis.** 6-0-0-Q.

701. **Seminar in Analysis of Linguistic Structure.** 3-4-0-S. May be repeated as topic varies to a total of six hours.

702. **Readings in Linguistics.** 3-4-0-W. May be repeated as topic varies to a total of six hours.

710. **Seminar in Modern Fiction and Drama.** 3-4-0-Su, 1975. May be repeated as topic varies to a total of six hours.

714. **Tutorial in English and Germanic Philology I.** 3-4-0-X.
715. **Tutorial in English and Germanic Philology II.** 3-4-0-X.

721. **Advanced Creative Writing.** 3-4-0-F,Su. May be repeated for a total of nine hours.

740. **Bibliography and Methods of Research in English.** 3-4-0-F,Su.
744. **Seminar in Literary Principles and Processes.** 3-4-0-S.
750. **Anglo-Saxon.** 3-4-0-W, 1975-1976.
751. **Beowulf.** 3-4-0-S, 1976.
753. **Middle English.** 3-4-0-F.

754. **Seminar in Medieval Literature.** 3-4-0-W, 1975-1976. May be repeated as topic varies to a total of six hours.

756. **Seminar in Non-Dramatic Renaissance Literature.** 3-4-0-Su.
757. **Seminar in Renaissance Drama.** 3-4-0-Su, 1975.

760. **Seminar in Seventeenth Century British Literature.** 3-4-0-S. May be repeated as topic varies to a toal of six hours.

761. **Seminar in Johnson and His Contemporaries.** 3-4-0-S.
762. **Seminar in Pope and His Contemporaries.** 3-4-0-W.
763. **Seminar in English Romanticism.** 3-4-0-F, 1975.
764. **Seminar in Victorianism.** 3-4-0-W.

766. **Seminar in Modern Poetry.** 3-4-0-W, 1975-1976. May be repeated as topic varies to a total of six hours.

770. **Seminar in American Literature I.** 3-4-0-W. May be repeated as topic varies to a total of six hours.

771. **Seminar in American Literature II.** 3-4-0-F,Su. May be repeated as topic varies to a total of six hours.

772. **Readings in American Literature.** 3-4-0-S.

790. **English Colloquium.** 1-1-0-F,W,S. May be repeated as topic varies to a total of three hours.

791. **Research in English.** 1-9 hrs. arr. Q. Prerequisite: Approval of the major professor.

792. **Special Problems.** 3 hrs. arr. Q.

797. **Independent Study and Research.** Hrs. arr. Q. Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a dissertation and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

898. **Dissertation.**

ENVIRONMENTAL SCIENCE (ESC-335)

501. **Pollution Detection.** 4-2-6-F. The chemical, physical, and biological techniques required for field sampling and testing of air and water pollutants.

502. **Pollution Analysis.** 4-2-6-W. A continuation of ESC 501 with emphasis on evaluation of pollution abatement systems.

511. **Electronics for Scientists.** 4-2-6-W,S. Automation of laboratory and field measurements, digital computer logic circuits, causes of instrumentation malfunctions.

789. **Seminar in Environmental Science I, II, III.** 1-1-0-X.

FINANCE (FIN-615)

625. **Managerial Finance.** 3-4-0-Q. Prerequisite: One course in finance and one in accounting. Basic decision-making issues in managing short-term and long-term funds. Quantitative tools are applied at all levels.

630. **Problems in Finance.** 3-4-0-S. Prerequisite: FIN 624 or equivalent. Application of tested and experimental financial theory by financial managers to decision making problems relating to working capital and fixed capital management.

640. **Managing Financial Institutions.** 3-4-0-W. Gives the student an understanding of all of the major financial institutions, their organizational structures, functions, and methods of operation.

650. **Real Estate.** 3-4-0-Su. An overview of real estate as it relates to the business world including location analysis, real estate investment, and tax factors.

652. **Problems in Investment.** 3-4-0-W. Prerequisite: FIN 625 or equivalent. Application of tested and experimental theories by investment managers to problems of short and long-term decision making.

685. **Business Environment.** 3-4-0-F,S. The relevant environmental pressures shaping the corporation are explored: government, labor, values and ethics, innovation and technology.

692. **Special Problems.** 3-0-0-X. A supervised course in individual study and research.

697. **Independent Study and Research.** 3-0-0-X. Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a thesis and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

FOOD AND NUTRITION (FN-815)

530. **Experimental Foods.** 3-2-4-S. Prerequisite: FN 362.

560. **Advanced Nutrition.** 3-4-0-F. Prerequisite: FN 362.

561. **Diet in Disease.** 3-4-0-W. Prerequisite: FN 560.

570. **The School Lunch.** 3-2-4-S.

571. **Institution Food Purchasing.** 3-4-0-W.

662. **Community Health and Nutrition.** 3-4-0-S.

663. **The Nutrition of Children.** 3-4-0-X.

664. **Seminar in Food and Nutrition.** 1-4 hrs. arr. W,Su.

672. **Quantity Food Preparation.** 3-1-5-Su. Prerequisite: Permission of instructor.

673. **School Lunch Supervision.** 3-4-0-X.

674. **Institution Organization and Administration.** 3-4-0-F.

691. **Research in Food and Nutrition.** 1-4 hrs. arr. Q.

692. **Special Problems in:**

a. **Nutrition.** 1-4 hrs. arr. Q.

b. **Institution Management.** 1-4 hrs. arr. Q.

697. **Independent Study and Research.** Hrs. arr. Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a thesis and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

698. **Thesis.** 6-0-0-X. Credit deferred until thesis is completed.

FOOD SCIENCE AND TECHNOLOGY (FST-396)

505. **Food Process Engineering.** 3-4-0-X. Application of chemical engineering principles in food processing.

510. **Food and Drug Laws — Standards and Regulations.** 3-4-0-X. Federal, State, and city food and drug laws, and how they regulate the manufacture, distribution and use of foods and regulated products.

550. **Food Analysis I.** 4-2-4-X. Principles of official and acceptable chemical, microbiological, and physical methods used in food analysis, and application of these methods to examination of raw and processed foods.

551. **Food Analysis II.** 4-2-4-X. Principles of official and acceptable chemical,

microbiological, and physical methods used in food analysis, and application of these methods to examination of raw and processed foods.

687. **Seminar in Food Science.** 3 hrs. arr. **X.** Selected topics in the chemistry, biochemistry, and microbiology of foods and food products.

688. **Seminar in Food Technology.** 3 hrs. arr. **X.** Selected topics in the application of food science principles to the food industry.

692. **Special Problems in Food Science and Technology I, II, III, IV.** 2-8 hrs. arr. **Q.** A course in special techniques, designed for food science and technology majors.

697. **Independent Study and Research.** 1-9 hrs. arr. **X.** Students who are not in residence but who are actively working on a thesis and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

698. **Thesis.** 6 hrs. arr. **Q.**

710. **Food Enzymes.** 3-4-0-**X.** A review of enzymatic reactions and problems occurring in food during collection, manufacture, storage, and distribution.

720. **Food Toxicology.** 4-2-4-**X.** Principles and processes of food spoilage and toxicology.

730. **Synthetic Foods.** 4-2-4-**X.** Current and future concepts of synthetic and unconventional foods will be discussed and evaluated.

FOREIGN LANGUAGES (FL-228)

500. **Introduction to Exotic Languages.** 3-4-0-**W,S,Su.** May be taken for a total of nine hours.

501. **Advanced Credit for Study Abroad.** 3-9 hrs. arr. **Q.** Prerequisites: Advanced knowledge of the language to be studied; otherwise same as FL 301. (See FL 301 in undergraduate catalog.)

502. **Introduction to the Advanced Study of Foreign Literature.** 3-4-0-**W.**

503. **Translation.** 3-4-0-**X.** May be taken for a total of nine hours.

504. **Methods of Teaching Foreign Language.** 3-4-0-**X.** May be taken for a total of six hours.

515. **French: History of Literature.** 3-4-0-**Q.** May be taken for a total of twelve hours.

525. **German: History of Literature.** 3-4-0-**Q.** May be taken for a total of twelve hours.

531. **Greek: Three.** 3-4-0-**X.**

532. **Greek: Four.** 3-4-0-**X.**

535. **Greek: Readings in Literature.** 3-4-0-**X.** May be taken for a total of nine hours.

555. **Latin: Readings in Literature.** 3-4-0-**X.** May be taken for a total of nine hours.

565. **Russian: History of Literature.** 3-4-0-**F.** May be taken for a total of twelve hours.

575. **Spanish: History of Peninsula Literature.** 3-4-0-**F.** May be taken for a total of twelve hours.

576. **Spanish: History of Latin American Literature.** 3-4-0-W,S. May be taken for a total of twelve hours.

691. **Research.** 3-4-0-Q.

692. **Special Problems.** 1-3 hrs. arr. Q. May be taken for a total of nine hours.

697. **Independent Study and Research.** Hrs. arr. X. Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a thesis and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

698. **Thesis.** 1-6 hrs. arr. Q.

711. **French: Old French.** 3-4-0-X. May be taken for a total of six hours.

721. **French: Seminar.** 3-4-0-Q. May be taken for a total of eighteen hours.

721. **German: Middle High German.** 3-4-0-X. May be taken for a total of six hours.

722. **German: Seminar.** 3-4-0-Q. May be taken for a total of eighteen hours.

771. **Spanish: Old Spanish.** 3-4-0-X. May be taken for a total of six hours.

772. **Spanish: Seminar.** 3-4-0-Q. May be taken for a total of eighteen hours.

GENETICS (GEN-312)

502. **Genetics.** 3-4-0-Q. Prerequisite: MIC 101 or BIO 101; one quarter of organic chemistry recommended. The fundamental principles of heredity.

503. **Advanced Genetics.** 4-2-4-W. Prerequisites: GEN 402-502 or 451-551. A continuation of GEN 402-502.

511. **Physiological Genetics.** 3-4-0-S, 1975 and alternate years. Prerequisite: GEN 403-503 or permission of instructor. Physiological concepts of heredity.

521. **Interpretation of Biological Data.** 3-2-2-X. Prerequisites: GEN 402-502 and permission of instructor. Techniques applicable to the design and interpretation of biological research data.

551. **Medical Genetics.** 3-4-0-Q. The basic principles of human genetics with emphasis on the causation of abnormality and disease.

561. **Microbial Genetics.** 3-4-0-X. Prerequisites: MIC 301 and GEN 403-503. The genetics and molecular biology of microorganisms and viruses.

691. **Research in Genetics.** 1-9 hrs. arr. Q.

692. **Special Problems in Genetics, I, II, III, IV.** 2 hrs. arr. Q. Individuals will be assigned a specific problem in genetics to investigate under faculty direction.

697. **Independent Study and Research.** 1-9 hrs. arr. X. Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a thesis and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

698. **Thesis.** 6 hrs. arr. Q.

731. **Cytogenetics.** 3-2-4-X. Prerequisite: GEN 402-502 or 451-551. Basic principles and techniques in human cytogenetics.

771. **Dynamics of Experimental Populations.** 3-4-0-X. Prerequisites: GEN 402-502, 403-503, or permission of instructor. Concepts associated with changes in population structure leading to the formation of species.

789. **Genetics Seminar I, II, III.** 1-1-0-X. The presentation and defense of current concepts and principles of genetics.

791. **Research in Genetics.** 1-9 hrs. arr. Q.

792. **Special Problems.** 3 hrs. arr. Q.

797. **Independent Study and Research.** 1-9 hrs. arr. X. Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a dissertation and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

898. **Dissertation.**

GEOGRAPHY (GHY-268)

510. **Advanced Cartography.** 3-4-0-F,S. Prerequisite: GHY 210. Map reproduction techniques, color preseparation, scribing, and quantitative symbolization.

511. **Aerial Photograph Interpretation.** 3-4-0-F. Systematic treatment of elements and steps involved in interpreting, measuring, and mapping of images appearing on aerial photographs.

512. **Remote Sensing of the Environment.** 3-4-0-W. Prerequisite: GHY 411 or consent of instructor. Theory and application of remotely-sensed imageries generated from aircraft and spacecraft for geographic, environmental, and planning purposes.

513. **Field Methods in Geography.** 3-4-0-S. Basic methods of geographic analysis used in classifying, analyzing, and reporting field-gathered data.

514. **Urban Field Methods.** 3-4-0-S, 1975. Prerequisite: GHY 460. Application of field techniques used in collecting, presenting, and analyzing data related to urban research problems.

515. **Quantitative Methods in Geography.** 3-4-0-W. Prerequisite: A basic course in statistical methods. Application of statistical and other quantitative techniques to problems of spatial analysis.

516. **Computer Applications in Geography.** 3-4-0-W,S. Prerequisite: GHY 415 or consent of instructor. Study and application of computer mapping as a tool of geographic analysis.

522. **Geography of Soils.** 3-4-0-S. Study of formation, distribution, and use of soils; emphasis on soils of south Mississippi; fieldwork and laboratory analysis.

525. **Environmental Climatology.** 3-4-0-Su. Study of climatological aspects of atmospheric pollution; includes chemical, medical, legal, economic, and community-planning dimensions of air pollution.

535. **Historical Geography.** 3-4-0-W. Study of evolution of cultural landscapes of the area now comprising the United States; emphasis on processes of change.

540. **Population and Settlement Geography.** 3-4-0-S. A geographical analysis of the biological and cultural characteristics of population.

551. **Industrial Location Analysis.** 3-4-0-S, 1975. Prerequisite: GHY 350 or consent of instructor. Principles of industrial location analysis; emphasis on theory, locational decision-making, and regional location of manufacturing.

552. **Rural Land Use.** 3-4-0-F. Prerequisite: GHY 350 or consent of instructor.

Study of characteristic ways that man utilizes rural land — including settlement, landholding, and agricultural patterns.

553. **Transportation Geography.** 3-4-0-F, 1975. Prerequisite: GHY 350 or consent of instructor. Study of the various transportation modes and the effect they have on contemporary development problems.

560. **Urban Geography.** 3-4-0-F. Prerequisite: GHY 350 or consent of instructor. Review of urban development, processes contributing to development, and effect these processes have on cities.

565. **Community and Regional Planning III: Programming and Implementation.** 3-4-0-W. Prerequisites: GHY 360, 361, 364 or consent of instructor. Consideration of various legal and institutional tools related to implementation of community and regional plans.

566. **Public Policy and the Planning Process.** 3-4-0-S. Deals with function of planning process in formulating effective public policy for development of communities and regions.

571. **Resource Management: Theories, Methods, and Models.** 3-4-0-W. Study of ecological, economic, cultural, and political decision theories, methods, and practices peculiar to resource management.

572. **Forest Resource Management.** 3-4-0-Su. Study of forest-management principles and practices related to both private and public forest holdings.

573. **Water Resources.** 3-4-0-F. Study of hydrologic processes and their application to needs of cities, industry, agriculture, and recreation.

574. **Watershed Management.** 3-4-0-S. Investigation of watersheds as planning and management units; emphasis on relationship of water to other resources. Game theory used.

575. **Coastal Zone Management.** 3-4-0-F. Study of coastal-zone problems and conflicts; emphasis on multiple-objective planning and resource-management procedures.

591. **Geography Internship.** 3-9 hrs. arr. **Q.** May be repeated for a total of nine hours.

610. **Seminar in Research Techniques and Presentation of Geographic Data.** 3-4-0-F. Required of all geography graduate students.

612. **Seminar in Geographic Techniques.** 3-4-0-X. May be repeated up to six (6) hours with change in content to include cartographic, aerial photo interpretation, remote sensing, statistical, and field problems.

623. **Seminar in Physical Geography.** 3-4-0-X. May be repeated up to six (6) hours with change in content.

631. **Seminar in Cultural-Historical Geography.** 3-4-0-Su, 1976.

650. **Seminar in Economic Geography.** 3-4-0-S, 1975. May be repeated up to six (6) hours with change in content.

665. **Seminar in Community and Regional Planning.** 3-4-0-Su, 1975.

671. **Seminar in Resource Management.** 3-4-0-S.

673. **Seminar in Water Resources.** 3-4-0-W.

680. **Seminar in History and Development of Geographic Thought.** 3-4-0-W. Required of all geography graduate students.

692. **Special Problems.** 1-6 hrs. arr. **Q.**

697. **Independent Study and Research.** Hrs. arr. **Q.** Not to be counted as credit

toward a degree. Students who are not in residence but who are actively working on a dissertation and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

698. **Thesis.** 6 hrs. arr. **Q.**

GEOLOGY (GLY-340)

501. **Principles of Stratigraphy.** 3-4-0-F. Weekend field trip. Prerequisites: GLY 301, 308, 341, or consent of instructor.

503. **Optical Mineralogy.** 3-3-3-W. Prerequisites: GLY 301, MAT 103. Introduction to optical mineralogy.

505. **Sedimentology.** 3-3-2-S. Prerequisite: GLY 301; 304 recommended. Origin of sedimentary particles, sedimentary structures, and classification of sedimentary rocks.

507. **Petrography.** 3-3-3-S. Prerequisites: GLY 304, 403. Systematic study of rocks by means of the polarizing microscope.

510. **Elements of Geochemistry.** 3-4-0-W. Prerequisites: GLY 301, 302, and CHE 103. Chemical processes operative in geology.

515. **Clay Mineralogy.** 3-3-2-S. Prerequisites: GLY 101 and 302, CHE 103. Origin, structure, and chemistry of clays, identification techniques, clay-water systems, soil formation and engineering applications.

520. **Elements of Geophysics.** 3-4-0-X. Prerequisites: GLY 101, MAT 103, PHY 103, and consent of instructor. Application of physics to geological investigations.

541. **Paleoecology.** 3-2-4-S. Alternate years. Prerequisites: GLY 341 and BIO 461, or consent of instructor with supervised catch-up readings.

543. **Micropaleontology I.** 3-1-6-S. Alternate years. Prerequisite: GLY 341. Taxonomy, morphology, and stratigraphic use of Foraminifera.

550. **Introductory Oceanography.** 3-4-0-F. Prerequisites: GLY 103, CHE 103, and PHY 103, and consent of instructor. Basic principles of geological oceanography.

552. **Physical Marine Geology.** 3-20-20-Su. Gulf Coast Research Laboratory. Prerequisites: GLY 103, 301, and one year of chemistry, or permission of instructor. Geological processes, sedimentary environments and geomorphological features of marine coastal intertidal and near-shore zones.

554. **Chemical Marine Geology.** 3-3-37-Su. Gulf Coast Research Laboratory. Prerequisites: GLY 103, 301, and one year of chemistry, or permission of instructor. Supervised research on the chemistry of the coastal waters of Mississippi and geochemistry of the bottoms.

570. **Petroleum Geology.** 3-2-4-F. Alternate years. Prerequisites: GLY 308, 401, or permission of instructor with supervised catch-up readings. The origin, occurrence, migration, and accumulation of oil and gas.

572. **Economic Geology.** 3-4-0-S. Prerequisites: GLY 301, 304, and 308. Principles of ore deposits. A formal geology report will be required.

574. **Geological Excursion.** 1-4 hrs. arr. Field studies of geological phenomena in areas remote from the campus, by means of 8-10 day field trips, between quarters.

692. **Special Problems in Geology I, II, III.** 1-3 hrs. arr. **Q.** Open to graduate students only. Assignment of a specific problem for investigation, not related to thesis research.

697. **Independent Study and Research.** 1-3 hrs. arr. **Q.** Not to be counted as as credit toward a degree. Students who are not in residence but who are actively working on a thesis and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

698. **Thesis.** 6 hrs. arr. **X.**

700. **Paleoclimatology.** 3-4-0-**X.** Prerequisite: Consent of instructor. Determination of past climatic conditions based on the rock, mineral and biologic record.

701. **Pleistocene Geology.** 3-4-0-**X.** Prerequisite: Consent of instructor. Earth history of the Pleistocene Epoch, with emphasis on glacial phenomena.

702. **Hypotheses of Continental Drift.** 3-4-0-**X.** Prerequisite: Consent of instructor. Study of evidence and hypotheses regarding crustal dislocations.

703. **Sedimentary Environments.** 3-4-0-**X.** Prerequisite: Consent of instructor. Comparison of modern environments of sedimentation with the evidence regarding paleoenvironments.

704. **Tectonics.** 3-4-0-**X.** Prerequisites: GLY 308 and consent of instructor. Investigation of large-scale crustal deformation.

705. **Petrology of Igneous Rocks.** 3-3-3-**F.** Alternate years. Prerequisites: GLY 403, 407; 410 desirable. Origin, classification, composition, and geochemistry of Igneous rocks.

706. **Petrology of Metamorphic Rocks.** 3-3-3-**F.** Alternate years. Prerequisites: GLY 403, 407; 410 desirable. Origin, classification, composition, and geochemistry of Metamorphic rocks.

708. **Gulf Coast Geology.** 3-4-0-**F.** Prerequisites: GLY 308 and 401. Stratigraphy, structural geology, and mineral resources of the Gulf Coastal Province of the U.S.

730. **Principles of Geology for High School Science Teachers.** 3-2-4-**X.** Prerequisites: Bachelor's degree in science or its equivalent. Principles of physical and historical geology for teachers. This course cannot be applied toward a major or minor degree in geology.

740. **Advanced Micropaleontology.** 3-1-6-**X.** Prerequisite: GLY 543, or consent of instructor.

789. **Seminar.** 1-0-2-**X.** May be repeated once for a total of two hours credit.

HEALTH (HTH-715)

510. **Health Education in Elementary Schools.** 3-4-0-**W,S.** Methods and materials for the elementary teacher, with special emphasis on instruction and coordination of school and community health programs.

511. **Health Education in Secondary Schools.** 3-4-0-**F,W,S.** Methods, materials, and techniques for high school teachers of health; conducting the school health program at the secondary level.

512. **Measurement and Evaluation in Health Education.** 3-4-0-**W,S.** A survey of

instruments and techniques used in measuring and evaluating selected aspects of personal health.

515. **School Health.** 3-4-0-**W,S.** Organization and administration of school health programs with emphasis on policies, procedures, problems, cooperating agencies, and field work.

520. **Communicable and Chronic Disease in Man.** 3-4-0-**F,S.** Problems, control programs, and prevention of communicable and chronic disease in modern society.

521. **Sanitation.** 3-4-0-**W.** Problems of sanitation in the home, school, food industry, water supply systems, and waste disposal systems.

522. **Drugs In Society.** 3-4-0-**F,S.** Psycho-social, medical, legal, and health aspects of drugs and their abuse, plus a current analysis of the problem in our society.

523. **Curriculum Development in Alcohol Education.** 3-4-0-**W,Su.** An analysis of alcoholism, instructional approaches, and community resources for teaching alcohol misuse and abuse.

530. **Marriage and Human Sexuality.** 3-4-0-**F,W,S.** Physical, emotional, and medical bases for successful courtship, marriage, and parenthood.

540. **Driver Education.** 3-4-0-**F,W,S.** A study of programs of instruction, use of training cars, delegation of authority, legal responsibilities, and qualifications of teachers.

541. **Traffic Safety Education.** 3-4-0-**S.** An in-depth study of driver, pedestrian, engineering, enforcement, and other traffic safety problems.

542. **Laboratory Programs in Driver Education.** 3-4-0-**W.** An examination of the aims, objectives, and role of laboratory programs in driver education. Directed laboratory experiences will be provided.

543. **Methods of Driver and Traffic Safety Education.** 3-3-1-**F,W,S.** Prerequisite: HTH 540. Organization and administration of driver education programs. Scheduling, financing, and public relations will be the primary areas of study.

544. **Simulation in Driver Education.** 3-2-2-**F,W,S.** Prerequisites: HTH 540 and 543. Audiovisual instructional methods that are used to complement and supplement other instructional techniques utilized in driver education programs.

546. **Innovative Programs in Driver Education.** 3-3-2-**W,Su.** New and unique adaptations of teaching methods to the broad problems of driver and traffic safety education.

588. **Motorcycle Education.** 3-2-2-**Su.** Analysis of motorcycle traffic problems and methods of teaching classroom and laboratory phases of motorcycle education.

589. **Driver Education for Special Students.** 3-4-0-**Su.** Curriculum development and teaching materials in traffic safety education.

692. **Special Problems.** 3-4-0-**Q.**

697. **Independent Study.** Hrs. arr. **X.** Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a thesis and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

698. **Thesis.** 6-0-0-**Q.** Credit deferred until thesis is completed.

710. **Seminar in Health.** 3-0-0-Su.

711. **Advanced Personal and Community Hygiene.** 3-4-0-F. Intensive study in personal and community hygiene.

715. **The School Health Program.** 3-4-0-W. The development, organization, and administration of school health services.

720. **Community Organization for Health Education.** 3-4-0-S. Study of communities and community organizations as they relate to organization of health services and health education.

730. **Marriage and Parenthood Education.** 3-4-0-W. A study of marriage and family life and the social adjustment problems of high school and college students.

740. **Facilities and Equipment in Driver Education Programs.** 3-4-0-S. Planning for facilities and equipment for driver education programs.

741. **Multi-Media Systems in Driver Education Programs.** 3-4-0-S. This course will deal with unique adaptation of newer media systems to the broad problems in driver and traffic safety.

742. **Organization and Administration of Driver and Traffic Safety Education.** 3-4-0-W. Organization and administration aspects of driver and traffic education as they relate to the total school and other specialized programs.

743. **Addictive Substances as Related to Traffic Safety Education.** 3-4-0-F. A study of the nature and effect of addictive substances on the human body and associated problems in traffic safety.

744. **Psychological Factors in Driver and Traffic Safety Education.** 3-4-0-W. A study of behavior with emphasis on attitudes, motivation, and adjustment and their relationship to safe driving.

745. **Safety Education.** 3-4-0-F,S. A study of the general program of safety education in public schools with special reference to methods, materials, and techniques of instruction.

746. **Administration and Supervision of Safety Programs.** 3-4-0-Su. Administration and supervision of governmental, industrial, agency, and community safety programs.

770. **Care and Treatment of Athletic Injuries.** 3-4-0-F,Su. Modern techniques and facilities to provide adequate prevention and treatment of athletic injuries.

780. **Research Techniques.** 3-4-0-W,Su. Discovery and recognition of problems, evaluation of problems and procedures, types and techniques of research.

791. **Research in Health.** 1-9 hrs. arr.

792. **Special Problems in Health.** 3-4-0-Q.

797. **Independent Study and Research.** Hrs. arr. X. Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a dissertation and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

898. **Dissertation.**

HISTORY (HIS-272)

510. **Russia to 1917.** 3-4-0-F.

511. **Russia Since 1917.** 3-4-0-S.

512. English Constitutional History. 3-4-0-S.
513. Medieval Life and Thought. 3-4-0-W.
514. Modern Germany. 3-4-0-W.
515. French Revolution and Napoleon. 3-4-0-F.
516. Europe 1815-1870. 3-4-0-W.
517. Europe 1870-1918. 3-4-0-S.
518. Europe 1918-1939. 3-4-0-W.
519. Europe Since 1939. 3-4-0-S.
520. Modern France. 3-4-0-F.
521. Tudor-Stuart Britain. 3-4-0-F.
522. Nineteenth Century Britain. 3-4-0-W.
523. Twentieth Century Britain. 3-4-0-S.
540. Age of Jefferson and Jackson. 3-4-0-F.
541. American Thought and Culture. 3-4-0-S.
542. The Old South. 3-4-0-F.
543. The New South. 3-4-0-W.
544. United States Constitutional History. 3-4-0-W.
545. U.S. Foreign Relations to 1914. 3-4-0-W.
546. U.S. Foreign Relations Since 1914. 3-4-0-S.
547. Colonial America. 3-4-0-F.
548. Revolutionary Era. 3-4-0-W.
549. American Political Leaders. 3-4-0-S.
550. Early American Frontier. 3-4-0-W.
551. Trans-Mississippi West. 3-4-0-S.
552. The Sectional Controversy and the Civil War, 1840-1865. 3-4-0-S.
553. Reconstruction and the Emergence of Modern America, 1865-1898. 3-4-0-F.
554. The Progressive Era, World War I, Prosperity and Depression, 1898-1933. 3-4-0-W.
555. The New Deal, World War II, and Post-War America, 1933-Present. 3-4-0-S.
580. History of Mexico and Caribbean. 3-4-0-F.
581. History of South America: The Andean Countries. 3-4-0-W.
582. History of South America: Brazil and the Rio de la Plata. 3-4-0-S.
692. Special Problems I, II, III, IV. 1-4 hrs. arr. Q.
697. Independent Study and Research. Hrs. arr. X. Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a thesis and consulting with the major professor or making use of the library or other University facilities must enroll in this course.
698. Thesis. 6-0-0-Q.
710. European Historiography. 3-4-0-W.
711. Medieval History. 3-4-0-S, 1974-75.
712, 713, 714. Seminar in European History, 1870 to Present. I, II, III. 3-4-0-S, 1974-75; F, 1974-75; F, 1974-75.
716. British History. 3-4-0-X.
717, 718. Reading Seminar in European History I, II. 3-4-0-S,Su.
740. American Historiography. 3-4-0-F.

741. **Seminar in Southern History.** 3-4-0-S, 1974-75.

742. **Seminar in U.S. Diplomatic History.** 3-4-0-W.

743. **Seminar in American Colonial and Revolutionary Period.** 3-4-0-F, 1974-75.

744. **Seminar in Nineteenth Century U.S.** 3-4-0-F, 1974-75.

745. **Seminar in Twentieth Century U.S.** 3-4-0-S.

746, 747. **Reading Seminar in American History I, II.** 3-4-0-W,S.

780. **Latin American History.** 3-4-0-X.

791. **Research in History.** 1-9 hrs. arr. Q. Prerequisite: Approval of the major professor.

794. **Internship in the Teaching of History.** 3-0-0-X.

Required of all Ph.D. candidates who have no teaching experiences at the college or university level and optional for those with such experience.

796. **Seminar and Practicum in the Teaching of History in Colleges and Universities.** 3-4-0-X.

797. **Independent Study and Research.** Hrs. arr. X. Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a dissertation and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

898. **Dissertation.**

HOME ECONOMICS EDUCATION (HEE-820)

601. **Home Economics in American Education.** 3-4-0-X. Trends and issues in curriculum development, instruction, supervision, administration, and research.

602. **Advanced Adult Education.** 3-4-0-Su. Current techniques and procedures for teaching adult programs in home economics.

603. **Teaching Family Living on the Secondary Level.** 3-4-0-F.

604. **Consumer Home Economics Education.** 3-4-0-X. Consumer problems in present day society.

605. **Supervision of Home Economics.** 3-4-0-W. Practices and procedures in the supervision of vocational home economics.

606. **Selected Topics in Home Economics Education.** 2-3-0-X. (May be repeated four times but limited to four hours toward a degree.) Prerequisite: The corresponding subject matter course. The development and application of units of work in selected areas in the secondary school program.

607. **Curriculum Problems in Home Economics.** 3-4-0-S. A practicum for developing home economic curriculum materials for local schools.

608. **Home Economics in Higher Education.** 3-4-0-F. Administrative problems and evaluation of departments, at the college level.

609. **Home Economics Related Occupations.** 3-4-0-Su. The exploration and planning of teaching units for home economics related occupations.

610. **Seminar in Home Economics Education.** 1-4-4-Q.

691. **Research in Home Economics Education.** 1-4-arr. Q.

692. **Special Problems in Home Economics Education.** 1-4-arr. Q.

697. **Independent Study and Research.** 1-4-arr-Q. Not to be counted toward a degree. Students who are not in residence but who are actively working on a thesis

and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

HOUSING AND HOME MANAGEMENT (H&HM-825)

640. **Home Engineering.** 3-4-0-X. This course includes a study of the selection, placement, and storage of home appliances and their use as related to the mechanical features.

644. **Seminar in Housing and Home Management.** 1-4 hrs. arr. **X.**

692. **Special Problems in Any of the Following Areas:** 1-4 hrs. arr. **X.**

a. Household Equipment.
b. Housing.
c. Home Furnishings.
d. Home Management.

INDUSTRIAL AND VOCATIONAL EDUCATION (IVE-165)

500. **School Shop Planning and Equipment Selection.** 3-4-0-**F.** A study of shop layout problems.

501. **Shop Care and Management.** 3-4-0-**F,W,Su.** Organization of students and physical facilities.

503. **Occupational Analysis and Course Construction.** 3-4-0-**X.** Analyzing occupations into their basic components and arranging for instructional purposes.

504. **Problems of the Coordinator.** 3-4-0-**S.** A study of the problems, procedures, techniques, etc., in the operation of part-time cooperative education.

521. **Power Transmissions.** 3-3-3-**W.** A study of mechanical, hydraulic, pneumatic and electrical power and transmission.

531. **Principles of Trade and Industrial Teaching.** 3-4-0-**W,S,Su.** A methods course for teaching trade and industrial subjects.

532. **Problems in Adult Education.** 3-4-0-**X.** Methods and techniques in teaching adults in industrial education classes.

533. **Curriculum Construction for Cooperative and Adult Vocational Education.** 3-4-0-**X.** Objectives, content and arrangement of units for teaching cooperative and evening classes.

534. **Occupational Surveys.** 3-4-0-**X.** Planning and conducting local surveys for educational purposes.

535. **Instructional Materials for Industrial Education.** 3-4-0-**Su,X.** Identification, selection, development, and use of instructional aids in vocational and technical education.

536. **Curriculum Construction for Vocational Technical Education.** 3-4-0-**S,Su.** Principles, practices and techniques in planning and establishing a class or program in vo-tech education.

581. **Testing and Evaluation in Vocational Technical Education.** 3-4-0-**S,Su.** Development and utilization of various measuring devices and techniques.

582. **School Shop Safety.** 3-4-0-F,W, Su. Analysis of fundamentals of accident prevention and their application in school shops.

602. **Foundations and Principles of Industrial Arts.** 3-4-0-S. A study of the underlying philosophy and principles of industrial arts education.

603. **Establishing the Industrial Arts Program.** 3-4-0-W. Planning and implementing new and expanding programs.

604. **Shop and Small Plant Design.** 3-4-0-X. Problems in design of work stations, production lines, and materials control.

605. **History of Industrial Education.** 3-4-0-F. A study of leaders, movements, and agencies in the development of industrial education.

606. **Philosophy of Industrial Arts Education.** 3-4-0-F. A study and evaluation of the leading philosophies in the field.

607. **Organization of Instructional Materials in Industrial Education.** 3-4-0-W. A study of the development and utilization of various instructional materials.

611. **Philosophy and Organization of Vocational Education.** 3-4-0-S,Su. Principles and development of vocational education under state and federal acts.

630. **Advanced Graphic Science.** 3-4-0-X. A study of materials and methods used in graphic science.

662. **Research Methods: Industrial Arts.** 3-4-0-X. A study of methodology, design, procedures and statistical treatment.

689. **Seminar in Industrial Education, I, II, III.** 2-3-0-X. May be taken three quarters.

692. **Special Problems in Industrial and Technical Education.** Hrs. arr. Individualized problems relevant to the area.

697. **Independent Study and Research.** Hrs. arr. Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a thesis and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

698. **Thesis.** 6-0-0-Q. Credit deferred until thesis is completed.

JOURNALISM (JOU-212)

521. **Public Relations.** 3-4-0-F.

522. **Publicity Methods.** 3-4-0-W.

525. **Business and Professional Publications.** 3-4-0-W, 1974, and alternate years.

528. **Public and Press Relations Management.** 3-4-0-S, 1974, and alternate years.

570. **Newspaper Organization & Management.** 3-4-0-F, 1974, and alternate years.

LIBRARY SCIENCE (LS-170)

570. **Selection and Organization of Multi-Media Materials and Services.** 3-4-0-Q. Principles and methods of developing multi-media materials and services in libraries.

571. **Library Preparation and Production of Multi-Media Materials.** 3-4-0-F,S. Prerequisite: LS 570 or CIF 619. Fundamental techniques for design and production of multi-media materials.

572. **Administration and Supervision of School Media Centers.** 3-4-0-W,Su. Prerequisite: LS 570 or CIF 619. A survey of current trends in the management and services of school library media centers.

591. **Library Administration Workshop.** 3-4-0-Su. Intensive two-week workshop on problems of media center administration. May be taken twice; only three hours of credit can be applied to degree requirements.

601. **Building Library Collections.** 3-4-0-X. Study of the principles and tools for selection of books and other library materials.

604. **Reference Resources and Services.** 3-4-0-X. Basic course to prepare students for reference and bibliographic work in public, school, and academic libraries.

608. **Principles of Classification and Cataloging.** 3-4-0-X. Study of, and practice in, the organization of materials according to Dewey Classification, Anglo-American Rules, and Sears Subject Headings.

610. **The Library in Society.** 3-4-0-Su. The library as a social institution, its background, and the forces that have shaped its development.

620. **History of Books and Printing.** 3-4-0-F. The evolution of the book from the earliest times to the present. An examination of the invention and spread of printing and its impact.

625. **Communication and Libraries.** 3-4-0-X. Survey of the mass communications media and the relationship of libraries to these media.

630. **Advanced Reference and Bibliography.** 3-4-0-X. Study of major bibliographic and reference sources common to large research and reference collection. Problems on reference services.

632. **United States Government Publications.** 3-4-0-X. Study of the types of government publications and tools for their bibliographic organization.

635. **Advanced Classification and Cataloging.** 3-4-0-X. Problems in classification and cataloging: serials, corporate entries, Library of Congress classification, organization of non-print materials.

640. **The College and University Library.** 3-4-0-W. The development and administration of the academic library.

641. **The Public Library.** 3-4-0-F. The development and administration of the public library. Problems in public library services.

642. **Special Libraries.** 3-4-0-X. The development and administration of the special libraries serving businesses, institutions, and government agencies.

650. **Library Service to Children.** 3-4-0-X. Consideration of library service to children in public and school libraries with emphasis upon objectives, functions, problems of administration.

655. **Library Service to Young People.** 3-4-0-X. The study of objectives, functions, and problems of administration of library services provided by public libraries and high school libraries to young people.

660. **Introduction to Information Science.** 3-4-0-X. Survey of information science as a field of study; the role of major information and documentation centers.

661. **Library Automation.** 3-4-0-X. Study of the theory of computer programming and its application to the solution of library problems.

662. **Information Retrieval Systems.** 3-4-0-X. Survey and evaluation of the structure and operation of information storage and retrieval systems currently applied in libraries and information centers.

665. **Bibliography and Literature of the Humanities.** 3-4-0-X. Selection, evaluation, and utilization of library resources in the humanities: philosophy, religion, literature, art, music, and related fields.

666. **Bibliography of the Social Sciences.** 3-4-0-X. Study, evaluation, and utilization of major library and information resources in the social sciences.

667. **Bibliography of Science and Technology.** 3-4-0-X. Study, evaluation, and utilization of information resources in the pure and applied sciences.

668. **Research Methods in Library and Information Science.** 3-4-0-X. Survey of scientific research methods and their application to the field of library and information science.

691. **Research in Library Science.** 1-12 hrs. arr.

692. **Special Problems I, II, III.** 1-3 hrs. arr. Prerequisite: LS 640, or LS 641 or LS 642.

694. **Field Problems.** 3-0-0-X.

697. **Independent Study and Research.** Hrs. arr. X. Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a thesis and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

698. **Thesis.** 6-0-0-X.

MANAGEMENT (MGT-620)

568. **Wage and Salary Administration.** 3-4-0-Q. Prerequisites: MGT 360. Problems in wage and salary administration including job analysis, job evaluation, incentive systems, wage surveys, and fringe benefits.

572. **Collective Bargaining.** 3-4-0-W,S,Su. Prerequisite: MGT 370. An integrated study of collective bargaining theory and practical application, augmented with cases and role playing.

582. **Production Problems Seminar.** 3-4-0-F,S. Prerequisite: Background in industrial management. A case approach to problems such as selection and maintenance of equipment, product mix and quality, and production controls.

584. **Problems in Personnel Administration.** 3-4-0-Q. Prerequisite: Background in personnel management. An application of the principles and techniques of personnel administration through the use of case analysis, incidents, and role playing.

610. **Production Management.** 3-4-0-Su. An analysis of managerial production functions and processes including product and plant planning, maintenance, quality control, and purchasing.

615. **Operations Research.** 3-4-0-F,S. An introductory course in the principles and techniques of operations research and management science.

620. **Problems in Management.** 3-4-0-W. A case study of selected social, economic, industrial, and personnel management problems.

625. **Human Relations in Business.** 3-4-0-Q. A study of the problems of individuals and groups as found in modern organizations.

630. **Survey of Labor-Management Relations.** 3-4-0-F. Prerequisite: Consent of department chairman. A survey of the development of the contemporary state of industrial relations, labor law, and collective bargaining.

660. **History and Philosophy of Management.** 3-4-0-Su. A review of and analysis of the writings of Taylor, Gilbreth, Fayol, and later writers in the development of scientific and modern management.

665. **Organization Theory and Practice.** 3-4-0-W. The design, analysis, and evaluation of organizational structures in a business and government environment.

670. **Business Policy.** 3-4-0-S,Su. Prerequisite: Consent of department chairman. A study of policy making and administration from a top management point of view.

692. **Special Problems in Management.** 3 hrs. arr. X. Prerequisite: Permission of department chairman.

MARKETING (MKT-625)

524. **Market Research.** 3-4-0-Q. Prerequisites: MKT 300 and ECO 302. A study of principles and techniques used in market research and evaluation of such research.

528. **Marketing Management.** 3-4-0-Q. A comprehensive case course designed to synthesize the more specialized marketing knowledge of the student.

558. **Promotion Development.** 3-4-0-W. A study of the relationship of the business organization to the various interest groups which affect its promotional results.

625. **Seminar in Marketing.** 3-4-0-F,S. A survey of marketing theory and practices designed to give the non-marketing students functional knowledge of the field.

640. **Market Planning.** 3-4-0-S. A case study of the methods used by firms to reach their marketing goals through the application of planning, budgeting, and costing theory.

650. **Market Research Seminar.** 3-4-0-F. A study of advanced research techniques used in market analysis.

660. **Seminar in Marketing Theory.** 3-4-0-W. A survey, analysis, and evaluation of the current research in marketing theory.

692. **Special Problems in Marketing.** 3-4-0-Q. Consent of the chairman of the Marketing Department is required prior to registration.

MARRIAGE AND FAMILY LIFE (MFL-830)

650. **Early Marriage Adjustment.** 3-4-0-F.

651. **Parents and Children.** 3-4-0-W.

652. **The Family in the Community.** 3-4-0-S. Designed to help the teacher understand better the social setting in which students live and its importance in the development of family living courses to meet student needs.

658. **Seminar in Family Living.** 1-4 hrs. arr. Su.

691. **Research in Family Living.** 1-4 hrs. arr. Q.

692. **Special Problems in Family Living.** 1-4 hrs. arr. X.

697. **Independent Study and Research.** Hrs. arr. X. Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a thesis and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

698. **Thesis.** 6-0-0-X. Credit deferred until thesis is completed.

MATHEMATICS (MAT-350)

510. **Mathematics for Teachers of Junior High School Mathematics.** 3-4-0-W,Su. Numbers and infinite sets, geometry, non-Euclidean geometry, coordinate geometry, trigonometry, functions, probability, statistics. (Open only to elementary and special education majors or as an elective for mathematics majors.)

511. **Vector Analysis.** 3-4-0-F,S. Prerequisite: MAT 379. Vector valued functions, space curves, line and surface integration with introduction to the divergence theorem, Green's and Stokes' theorems.

515. **Introduction to Differential Equations II.** 3-4-0-X. Prerequisite: MAT 405. Systems of linear differential equations, characteristic equations, operator methods, approximating solutions, Laplace transforms.

517. **Partial Differential Equations.** 3-4-0-X. Prerequisites: MAT 405 and MAT 411. Integrability conditions, quasilinear and linear equations, applications to physics, classification of second order equations and canonical forms, separation of variables.

518. **Linear Programming.** 3-4-0-X. Prerequisite: MAT 326. Convex sets, linear inequalities, extreme-point solutions, simplex procedure, applications.

520. **Statistics and Probability.** 3-4-0-X. Prerequisite: MAT 341. Permutations, combinations, binomial and multi-nomial theorems, induction, graphic methods, basic statistical concepts.

521. **Number Theory.** 3-4-0-W,Su. Prerequisite: MAT 341. Induction, well-ordering, division algorithm, Euclidean algorithm, Fundamental Theorem of arithmetic, number theoretic functions, congruences.

523. **Modern Algebra I.** 3-4-0-F,S. Prerequisite: MAT 341. Development of the integers, rational, real and complex numbers based on properties of the natural numbers.

524. **Modern Algebra II.** 3-4-0-W. Prerequisite: MAT 423. Subgroups, normal subgroups, quotient groups, permutation groups, homomorphisms and automorphisms of groups, Cayley's theorem.

525. **Fourier Series.** 3-4-0-X. Prerequisites: MAT 326 and MAT 405. Orthogonal functions, Fourier series, convergence and applications.

526. **Linear Algebra II.** 3-4-0-F,S. Prerequisite: MAT 326. Determinants,

polynomials, complex numbers, single linear transformations, orthogonal, unitary and symmetric linear transformations.

535. **Laplace Transform.** 3-4-0-X. Corequisite: MAT 405. Transforms, inverse transforms, convolution theorem, differentiation and integration of transforms, applications to differential equations.

536. **Theory of Functions of a Complex Variable I.** 3-4-0-W,S. Prerequisite: MAT 379. Complex numbers and functions, limits, continuity, differentiation, analytic functions, branches, contour integration, series.

541. **Advanced Calculus I.** 3-4-0-F. Point set theory, sequences, continuity, uniform continuity, limits, mean value theorems, L'Hospital's rule.

542. **Advanced Calculus II.** 3-4-0-W. Prerequisite: MAT 441. Riemann integration, Taylor's theorem, improper integrals, infinite series, uniform convergence.

543. **Advanced Calculus III.** 3-4-0-S. Prerequisite: MAT 442. Directional derivatives, partial derivatives, differentials, inverse and implicit functions.

560. **Numerical Analysis I.** 3-4-0-X. Prerequisites: MAT 326, MAT 379, CSS 240. Methods of solving equations and systems of equations, error analysis, difference equations.

561. **Numerical Analysis II.** 3-4-0-X. Prerequisites: MAT 405, MAT 460, CSS 340. Interpolating polynomial, numerical differentiation and integration, numerical solutions of differential equations, round off error.

570. **Geometry.** 3-4-0-F,S. Prerequisites: Secondary school geometry and MAT 341. Modern Euclidean geometry, non-Euclidean geometries, historical topics.

573. **Metric Spaces.** 3-4-0-X. Continuity, Hausdorff and countability axioms, products, Euclidean spaces, connectedness, compactness, Heine-Borel and Bolzano-Weierstrass theorems.

575. **General Topology I.** 3-4-0-X. General topological spaces, bases and subbases, continuity.

576. **General Topology II.** 3-4-0-X. Prerequisite: MAT 475. Connectedness, separation axioms, countability axioms, compactness, metrizability.

601. **Differential Geometry I.** 3-4-0-X. Prerequisite: MAT 411. An introduction to the theory of plane curves, space curves, and surfaces.

603. **Modern Algebra.** 3-4-0-X. Prerequisite: MAT 424. A study of the structure of rings, ideals, integral domains, and fields.

605. **Differential Equations I.** 3-4-0-X. Prerequisite: MAT 415. Topics from the theory of ordinary differential equations. Specific topics to be selected by the instructor.

606. **Differential Equations II.** 3-4-0-X. Prerequisite: MAT 417. Dirichlet, Neuman, and mixed boundary value problems. Classical techniques of solution of partial differential equations. Applications to various scientific fields.

636. **Functions of a Complex Variable II.** 3-4-0-X. Prerequisite: MAT 436. Taylor and Laurent series, residue calculus, conformal mapping with applications, integral formulas of the Poisson type, analytic continuation.

637. **Functions of a Complex Variable III.** 3-4-0-X. Prerequisite: MAT 636. A continuation of MAT 636.

641. **Functions of a Real Variable I.** 3-4-0-X. Prerequisite: MAT 443. Foundations of real analysis and introduction to Lebesque measure and integration.

642. **Functions of a Real Variable II.** 3-4-0-X. Prerequisite: MAT 641. Continuation of MAT 641.

651. **Applied Mathematics I.** 3-4-0-X. Vector spaces, linear transformations, matrices, eigenvalues, eigenvectors, diagonalization, spectral decomposition, cannonical forms.

652. **Applied Mathematics II.** 3-4-0-X. Prerequisite: MAT 651. Corequisite: MAT 442. Point sets in Euclidean n-space, sequences, continuity, convergence, integration, integral operator and expansion theorems.

653. **Applied Mathematics III.** 3-4-0-X. Prerequisite: MAT 652. Corequisite: MAT 443. Integral equations, series and special functions.

675. **Topology.** 3-4-0-X. Prerequisite: MAT 476. Properties of topological spaces such as imbedding and extension theorems, metrizability and compactification.

681. **Topics in Algebra.** 3-4-0-X. Prerequisites: MAT 424 and permission of the instructor.

682. **Topics in Analysis.** 3-4-0-X. Prerequisite: Permission of instructor.

683. **Topics in Topology and Geometry.** 3-4-0-X. Prerequisite: Permission of instructor.

689. **Mathematics Seminar I, II, III.** 1-2-0-Q. Prerequisite: Permission of instructor.

691. **Research in Mathematics.** 1-9 hrs. arr. Q.

697. **Independent Study and Research.** Hrs. arr. X. Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a thesis and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

698. **Thesis.** 6 hrs. arr. Q.

789. **Mathematics Seminar I, II, III.** 1-2-0-Q. Prerequisite: Permission of instructor.

MEDICAL TECHNOLOGY (MTC-354)

692. **Special Problems in Medical Technology.** 2-8 hrs. arr. Q. Individuals will be assigned some specific clinical problem in medical technology to investigate under faculty direction.

697. **Independent Study and Research.** 1-9 hrs. arr. Q. Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a thesis or doing an internship at a clinical facility must enroll in this course.

698. **Thesis.** 1-6 hrs. Q.

MICROBIOLOGY (MIC-310)

501. **Microorganisms in Health and Disease I.** 3-4-0-F,Su. Course not designed for majors in the College of Science and Technology. A comprehensive survey of the bacteria, viruses, rickettsiae, chlamydiae, yeasts, molds, protozoa and other human parasites.

502. **Microorganisms in Health and Disease II.** 3-4-0-W,Su. Prerequisite: MIC 501. Course not designed for majors in the College of Science and Technology. A study of immunology, serology, and pathogenic microorganisms.

505. **An Introduction to Clinical Instrumentation.** 3-2-4-W,S,Su. Instrumental procedures commonly encountered in modern medical technology.

508. **Advanced Microbiological Techniques.** 3-2-4-X. Prerequisites: MIC 301 and CHE 353. Special emphasis is placed on microbiological techniques beyond the scope of MIC 301.

511. **Pathogenic Microbiology.** 3-2-4-F,Su. Prerequisite: MIC 301. Schemes for isolation and identification of major groups of disease producing organisms.

512. **Advanced Pathogenic Microbiology.** 3-2-4-W,Su. Prerequisite: MIC 511. Continuation of MIC 511, on an advanced level; schemes for isolation and identification of major groups of disease producing organisms.

521. **Virology and Tissue Culture.** 3-2-4-X. Prerequisite: MIC 301. Survey of viruses and viral classification, including viral diseases, involving tissue culture techniques as applied to virology.

541. **Immunology and Serology.** 3-2-4-S. Prerequisite: MIC 512. Studies of infection, resistance, types of immunity, hypersensitivity and major techniques of diagnostic immunological reactions.

555. **Microbial Physiology.** 3-4-0-X. Prerequisite: MIC 301. Studies of the microorganisms response to the environment by means of adaptive control mechanisms.

561. **Food Microbiology.** 3-2-4-X. Prerequisite: MIC 301. Microorganisms affiliated with the preparation, spoilage, pathogenicity, and sanitation of foods and food products.

562. **Dairy Microbiology.** 3-2-4-X. Prerequisite: MIC 301. The preservation, fermentation and spoilage of milk and dairy products.

571. **Microbiology of Water and Sewage.** 3-2-4-X. Prerequisites: MIC 301 and CHE 353. Control of pure water supply; sources and types of pollution and control of sewage disposal.

581. **Soil Microbiology.** 3-2-4-X. Prerequisites: MIC 301 and CHE 353. Study of soil microflora, emphasis on nitrogen-carbon cycle of environemt.

691. **Research in Microbiology.** 1-9 hrs. arr. **Q.**

692. **Microbiological Problems I, II, III, IV.** 2 hrs. each arr. **Q.** Offered only by special arrangement. A course in special techniques, designed for majors with a need for certain microbiological techniques as tools for future research.

697. **Independent Study and Research.** 1-9 hrs. arr. **X.** Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a thesis or making use of University facilities must enroll in this course.

698. **Thesis.** 1-6 hrs. arr. **Q.**

731. **Medical Mycology.** 3-2-4-X. Prerequisite: Consent of instructor. Consideration of the fungi of medical significance.

742. **Principles of Immunochemistry.** 3-2-4-X. Prerequisite: MIC 541. A study of the chemistry of antigens, antibodies and complement and the mechanism of their interaction. Emphasis on the quantitative aspects of serological reactions.

743. **Immunochematology.** 3-2-4-X. Prerequisite: MIC 541. A study of the

serology, genetics, and anthropological aspects of human blood groups, isoantigens and antibodies.

751. **Advanced Microbial Physiology.** 3-4-0-X. Concepts of microbial nutrition, metabolism, adaptation, and genetics as related to growth and environment.

761. **Industrial Microbiology.** 3-2-4-X. An intensive study of yeasts, molds, and bacteria as they are applied in the production of amino acids, vitamins, steroids, enzymes, organic acids and alcohols.

762. **Industrial Microbiology.** 3-2-4-X. Continuation of MIC 761.

789. **Microbiology Seminar I, II, III.** 1-1-0-X. The presentation and defense of current, classical concepts and principles of microbiology.

791. **Research in Microbiology.** 1-9 hrs. arr. **Q.**

792. **Special Problems.** 3 hrs. arr. **Q.**

797. **Independent Study and Research.** 1-9 hrs. arr. **X.** Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a dissertation or making use of University facilities must enroll in this course.

898. **Dissertation.**

MUSIC (MUS-675)

531. **History of Opera.** 3-4-0-S. The history of musical theatre from Greek drama to present. Open to non-music majors with consent of instructor.

532. **American Music.** 3-4-0-Su. A study of the development of music in North America. Open to non-music majors with consent of instructor.

533. **20th Century Music.** 3-4-0-S. Examination of music trends since Debussy and Mahler. Open to non-music majors with consent of instructor.

534. **Ancient, Medieval, and Renaissance Music.** 3-4-0-Su. A study of the rise of music in the ancient world, the beginning of western music and of polyphony. Open to non-music majors with consent of instructor.

535. **Baroque Music.** 3-4-0-F. The development of musical styles and forms from Monteverdi through J.S. Bach. Open to non-music majors with consent of instructor.

536. **18th Century Music.** 3-4-0-F. The development of classical styles and forms, emphasis on style galant, Empfindsamer Still, and the Viennese classicists. Open to non-music majors with consent of instructor.

537. **19th Century Music.** 3-4-0-W. The development of musical romanticism, emphasis on the expansion of classical forms, and the appearance of new stylistic concepts. Open to non-music majors with consent of instructor.

540. **Vocal Literature.** 2-3-0-X.

541. **Vocal Literature.** 2-3-0-X. A continuation of MUS 540.

542. **Piano Literature.** 2-3-0-X.

543. **Piano Literature.** 2-3-0-X. A continuation of MUS 542.

544. **Organ Literature.** 2-3-0-X.

545. **Organ Literature.** 2-3-0-X. A continuation of MUS 544.

546. **Instrumental Literature.** 2-3-0-X.

547. **Instrumental Literature.** 2-3-0-X. A continuation of MUS 546.

548. **Choral Literature.** 2-3-0-X.

549. **Choral Literature.** 2-3-0-X. A continuation of MUS 548.

550. **Symphonic Literature.** 3-4-0-F. A history and literature of the symphony orchestra from 1600 to the present. Open to non-music majors with consent of instructor.

551. **Chamber Music.** 3-4-0-W. A survey of music for small instrumental ensembles. Open to non-music majors with consent of instructor.

559. **Church Music Colloquium.** 3-4-0-S. Philosophies of church music as well as the administration, liturgies, and related materials will be studied.

562. **Hymnology.** 3-4-0-W. The history of the Christian hymn from its root to present-day form.

692. **Special Studies I, II, III.** 1-3 hrs. arr. Q. Investigation of specialized areas of interest. A committee of not less than three graduate faculty is appointed to evaluate the results of each study.

698. **Thesis.** 6-0-0-Q.

702. **Bibliography for Music Education.** 3-4-0-F,Su. A detailed examination of the basic research materials available to music and music education students. This includes both books and serial publications.

711. **Pedagogy of Theory.** 2-3-0-X. A course in the teaching of music theory in the senior high school as well as the college level.

712. **Seminar in Composition.** 3-4-0-X. A composition class for non-composition majors.

713. **Seminar in Music Theory.** 2-3-0-X. For theory and composition majors; open to others with consent of instructor.

714. **Composition in a Large Form.** 6 hrs. arr. X. Open to students with a major in theory and composition.

715. **Recital.** 1-3 hrs. arr. Q. At the discretion of the major professor, each student may be required to pass a pre-recital audition before a committee of the graduate faculty.

720. **Graduate Music Theory.** 2-3-0-F,Su. A survey of the materials of music with emphasis on the study of the harmonic system of the 18th and 19th centuries. Credit for this course may not be counted toward a graduate degree.

721. **Analytical Techniques.** 2-3-0-F,X. A course designed to develop technique in analysis of music from the time of early polyphony through the Baroque period.

722. **Analytical Techniques.** 2-3-0-W,X. A course designed to develop techniques in analysis of music in the Classical and Romantic periods.

723. **Seminar in 20th Century Compositional Techniques.** 3-4-0-S. A seminar in techniques utilized by composers in the 20th century. Emphasis will be placed on analysis of selected works.

724. **Pre-Baroque Counterpoint.** 2-3-0-F, Su., 1975. Contrapuntal writing up to eight parts. Prerequisite: MUS 321 or consent of instructor.

725. **Tonal Counterpoint.** 2-3-0-W,Su, 1976. Contrapuntal writing culminating in the fugue. Prerequisite: MUS 322 or consent of instructor.

726. **20th Century Counterpoint.** 2-3-0-S,Su, 1977. Contrapuntal writing in contemporary idioms. Prerequisite: MUS 302 or consent of instructor.

727. **Advanced Orchestration.** 3-4-0-X. May be taken three times. Prerequisites: MUS 401 or consent of instructor.

728. **Preparation and Publication of Music.** 3-4-0-S. A course designed to acquaint students with problems involved in preparing music for professional purposes.

730. **Graduate Music History.** 2-3-0-F,Su. A rapid study of music from Gregorian Chant through Penderecki. This course is required of all entering graduate students, but may be waived subject to an entrance examination in music history. Not to be counted toward a degree in music or music education.

731. **Seminar in Performance Practices I.** 3-4-0-W,X. A study of the conductors and performer's problems in the interpretation and performance of vocal and instrumental music of the 17th and 18th century.

732. **Seminar in Performance Practices II.** 3-4-0-S,X. A study of the conductor's and performer's problems in the interpretation and performance of vocal and instrumental music of the 19th and 20th century.

733. **History of Style in Music.** 3-4-0-S,X. Detailed analysis of selected musical works from antiquity to the 20th century. Doctoral students and conducting majors only.

760. **Seminar in History of Church Music.** 3-4-0-X. Sacred choral literature from the Middle Ages to the present is surveyed. Organ literature as it applies to the church service is also examined.

761. **Seminar in Music Literature.** 3-4-0-F. A course designed to expand the student's knowledge of music literature through a period, historical, or school approach.

762. **Seminar in Music Literature.** 3-4-0-W. A continuation of MUS 761.

763. **Seminar in Music Literature.** 3-4-0-S. A continuation of MUS 762.

786. **Arranging Music for School Bands.** 2-2-1-X. This course is designed to provide the arranger with the essential techniques of scoring for school bands and orchestras.

787. **Arranging for School Choruses.** 2-3-0-X. Concepts and techniques of scoring for voices, with emphasis on arranging rather than on original composition for choral organizations.

791. **Research in Music.** 1-9 hrs. arr.

792. **Special Studies I, II, III.** 1-3 hrs. arr. each.

797. **Independent Study and Research.** Hrs. arr. **X.** Not to be counted toward a degree. Students who are not in residence but who are actively working on a dissertation with the major professor or making use of the library or other University facilities must enroll in this course.

821. **Advanced Analytical Techniques.** 2-3-0-F,Su, 1975. An in-depth analysis of selected works prior to 1750. Prerequisite: MUS 721 or consent of music theory faculty.

822. **Advanced Analytical Techniques.** 2-3-0-W,Su, 1976. An in-depth analysis of selected works chosen from the classical and romantic periods. Prerequisite: MUS 722 or consent of the music theory faculty.

823. **Advanced Analytical Techniques.** 2-3-0-S,Su, 1977. An in-depth analysis of selected works chosen from the 20th Century. Prerequisite: MUS 723 or consent of the music theory faculty.

870. **First Doctoral Solo Recital.** 3-0-4-Q.

871. **Doctoral Lecture Recital.** 3-0-4-Q.

872. **Second Doctoral Solo Recital.** 1-0-4-**Q.**
873. **Concerto Performance with Band or Orchestra.** 1-0-4-**Q.**
874. **Major Solo Role in an Opera.** 1-0-4-**Q.**
875. **Major Solo Role in an Oratorio.** 1-0-4-**Q.**
876. **Chamber Music Recital.** 1-0-4-**Q.**
898. **Dissertation.**

MUSIC EDUCATION (MED-680)

524. **Instrumental Repair.** 3-2-2-**F,W,Su.**
Topic I. Organ Design and Repair. 3-2-2-**F.**
Topic II. Piano Tuning. 3-2-2-**W,Su.**
Topic III. String and Wind Instrument Repair. 3-2-2-**Su.**

590. **Piano Workshop.** 2-0-0-**X.** A course designed to meet the needs of the piano teacher, including a survey of standard materials together with a presentation of modern teaching methods.

591. **Instrumental Workshop.** 2-0-0-**W,Su.** May be repeated for a maximum of six hours credit. Cannot be applied toward a music degree.

592. **Choral Workshop.** 2-0-0-**W,Su.** May be repeated for a maximum of six hours credit. Cannot be applied toward a music degree.

593. **Elementary Workshop.** 2-0-0-**X.** Intensive examination of current problems, trends, and materials in the field of elementary music education. Cannot be applied toward a music degree.

594. **Marching and Percussion Workshop.** 2-0-0-**Su.** May be repeated for a maximum of six hours credit. Cannot be applied toward a music degree.

697. **Independent Study and Research.** Hrs. arr. **X.** Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a thesis and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

698. **Thesis.** 6-0-0-**Q.** No thesis will be accepted unless accompanied by an abstract. Thesis which employ questionnaires will not be accepted unless accompanied by summaries of the findings to be mailed to respondents.

710. **Band Literature.** 3-4-0-**Su, X.** A study of band literature from its emergence to the present. Emphasis is placed on preparation of representative literature for performance.

714. **Administration and Supervision of Elementary and Secondary School Music Programs.** 3-4-0-**W,Su.** The organization, supervision, and evaluation of the total music program, including program development, problems of finance, and selection of personnel and equipment.

715. **Research Project.** 3-0-0-**Q.** Prerequisite: Approval of the major professor.

725. **Foundations and Principles of Music Education.** 3-4-0-**F,Su.** Historical and philosophical foundations of the total music education program, and principles of teaching, learning, organization, administration.

726. **Research in Music Education.** 3-4-0-**W,Su.** Prerequisites: RED 601 or equivalent and MUS 702. Investigation of the current research and literature in music education; study of writing techniques pertinent to music education research.

731. **Graduate Conducting I.** 2-2-1-F,Su. Development of conducting skills, rehearsal techniques, study and preparation of scores of standard band, choral, and orchestral repertoire.

732. **Graduate Conducting II.** 2-2-1-W,Su, 1975. A continuation of MED 731.

733. **Seminar in Conducting.** 3-4-0-S,Su. Techniques of advanced choral and instrumental conducting. Score analysis and problems of preparation and performance.

734. **Woodwind Techniques and Materials.** 2-3-0-F,Su. A course dealing with the problems of teaching woodwind instruments and a comprehensive study of woodwind literature.

735. **Brass Techniques and Materials.** 2-3-0-W,Su. A comprehensive survey of teaching techniques for the brasses with a survey of teaching materials emphasizing pedagogy textbooks and books designed for class instruction.

736. **Percussion Techniques and Materials.** 2-3-0-S,Su. Performance techniques of all percussion instruments and a survey of teaching materials and literature for percussion.

737. **String Techniques and Materials.** 2-3-0-F,Su. A comprehensive survey of teaching techniques for stringed instruments; survey of teaching materials emphasizing pedagogy textbooks and method books.

738. **Keyboard Techniques and Materials.** 2-3-0-W,Su. An examination of keyboard literature as it relates to the techniques and practices of piano instruction.

739. **Vocal Techniques and Materials.** 2-3-0-S,Su. Techniques and procedures for teaching correct vocal production habits; examination of choral literature for secondary school and collegiate groups.

740. **Music Education in the Elementary Schools.** 3-4-0-Su,X. An advanced course in the development of music education programs for children.

750. **Music in General Education.** 3-4-0-S,Su. An examination of the role of music in the general education of students throughout the educational system.

755. **Aesthetics and Psychology of Music.** 3-4-0-F,X. An examination of issues and theoretical positions in the areas of philosophy of music and of musical learning.

756. **Evaluation and Guidance in Music Education.** 3-4-0-W,X. The administration and interpretation of tests of musical talent and musical achievement.

791. **Research in Music Education.** 3-0-0-Q. Prerequisite: Approval of the major professor.

797. **Independent Study and Research.** Hrs. arr. X. Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a dissertation and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

825. **Doctoral Seminar in Music Education.** 3-4-0-W,X. Orientation to doctoral study. Studies in the history and philosophy of music education.

826. **Doctoral Seminar in Music Education.** 3-4-0-S,X. Primary focus on advanced research methods, techniques, and procedures appropriate to the doctoral level of music education.

828. **Administration of College and University Music Programs.** 3-4-0-Su, 1975. A practical course in the principles of administration, organization, and goals of music programs at the college or university level.

898. **Dissertation.**

PHILOSOPHY (PHI-284)

551. **Political Philosophy.** 3-4-0-X. The major schools of political philosophy from classical to contemporary times.

554. **Philosophical Systems.** 3-4-0-X. A more advanced study of rationalism, idealism, existentialism, phenomenology, and analytical philosophy.

556. **The Philosophy of Science.** 3-4-0-X. The conditions and status of knowledge, perception, measurement, hypothesis and causality.

557. **Aesthetics.** 3-4-0-X. An analysis of theories of art and beauty from Plato to the present.

558. **Symbolic Logic.** 3-4-0-X. The basic theory and operations of the sentential calculus, quantification, and the logic of relations.

620. **Seminar in Metaphysics.** 3-4-0-X. Classical and contemporary metaphysics will be examined. Modern criticism by logicians, analytic philosophers, and philosophers of science will be presented.

625. **Seminar in Modern Philosophy.** 3-4-0-X. A critical investigation of the writings of selected modern and contemporary philosophers.

630. **Seminar in Epistomology.** 3-4-0-X. The problem of knowledge as presented in modern philosophic thought. Topics include the mind-body problem, the neural identity problem, behaviorism, etc.

635. **Ethics.** 3-4-0-X. An advanced study of ethical systems.

636. **Major Philosopher.** 3-4-0-X. An advanced study of the contributions of a selected philosopher.

692. **Special Problems.** 1-6 hrs. arr. X. A problem study to be approved by the department chairman.

697. **Independent Study and Research.** 3 hrs. arr. X. Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a thesis and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

698. **Thesis.** 6 hrs. arr. X.

PHYSICAL EDUCATION (PE-730)

501. **Corrective, Adaptive, and Developmental Physical Education.** 3-4-0-W,Su. Recognition of and corrective exercises for functional abnormalities.

504. **Motor Development.** 3-4-0-W,Su. A study of the motor aspects of human growth and development processes.

524. **Seminar in Elementary School Physical Education.** 3-4-0-W,Su. Comprehensive readings and discussions of all aspects of elementary school physical education.

570. **Development of Athletic Attributes.** 3-4-0-**Q.** The development and administering of strength, endurance, flexibility, reaction, speed, and agility programs.

571. **Practice Organization, Scouting, and Communication Techniques.** 3-4-0-**F,S,Su.** Daily practice plans. Scouting techniques, cinematography, instructional materials, techniques, and equipment for coaches.

691. **Research I, II, III.** 3-9 hrs. arr. **Q.**

692. **Special Problems.** 3-0-0-**Q.**

697. **Independent Study.** 1-6 hrs. arr. **Q.** Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a thesis and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

698. **Thesis.** 6-0-0-**Q.**

701. **Advanced Physiology of Exercise.** 3-4-0-**W,Su.** Circulatory, respiratory, nervous, and muscular system during and after physical activity.

702. **Physiology of Exercise Laboratory.** 2-0-2-**W,Su.** Use and care of physiology laboratory equipment.

703. **Advanced Kinesiology.** 3-4-0-**F,S.** The application of anatomical and physiological principles of kinesiology to physical activity.

704. **Tests and Measurements in Physical Education.** 3-4-0-**F,S.** Tests of fitness, skills, and abilities. Administration and interpretation.

705. **Motor Learning.** 3-4-0-**F,S.** Physical and psychological variables essential to motor learning.

709. **Age Characteristics of Motor Skills.** 3-4-0-**W,Su.** Analysis of activities and relationships to motor development of children in grades kindergarten through sixth.

720. **Problems of Administration in Physical Education.** 3-4-0-**W,Su.** Staff, finance, facilities, programs, and other problems faced by administrators.

722. **Organization and Administration of Intramural and Extramural Activities.** 3-4-0-**F,S.** Theory and practice in the organization and administration programs.

723. **Principles of Teaching Physical Education.** 3-4-0-**W,Su.** Developing personal skills for graduate students in methods of teaching, employing physiological and kinesiological principles.

742. **Problems of Curriculum in Physical Education.** 3-4-0-**W,Su.** Fundamental principles and bases of curriculum construction, analysis of activity for teaching purposes and program planning.

744. **Foundations and Trends in Health and Physical Education.** 3-4-0-**F,S.** Scientific bases, history, principles, curricula, and professional preparation in health and physical education.

750. **Facilities and Equipment in Physical Education.** 3-4-0-**W,Su.** Planning for indoor, outdoor, and special facilities and in physical education.

770. **Administration of Athletics.** 3-4-0-**W,S,Su.** Special emphasis on problems of the athletic director and coach in organizing and directing the athletic program through all levels of the educational structure.

771. **Special Athletic Problems — Football.** 3-4-0-**W,Su.** Defining, analyzing,

and solving specific athletic problems relating to the sport of football through study and research.

772. **Special Athletic Problems — Basketball. 3-4-0-F,Su.** Defining, analyzing, and solving specific athletic problems relating to the sport of basketball through study and research.

773. **Special Athletic Problems — Baseball. 3-4-0-Su.** Defining, analyzing, and solving specific athletic problems relating to the sport of baseball through study and research.

774. **Special Athletic Problems — Track. 3-4-0-W.** Defining, analyzing, and solving specific athletic problems relating to the sport of track through study and research.

775. **Minor Sports. 2-1-1-F,W,S.** Defining, analyzing, and solving specific athletic problems relating to minor sports through study and research.

776. **Athletic Seminar. 3-4-0-Su.** An in-depth study and analysis to enhance professional growth in athletics as it relates to advanced skills and knowledge of coaching.

777. **Athletic Seminar. 3-4-0-X.** Continuation of PE 776. Topics vary.

780. **Research Techniques. 3-4-0-F,S.** Discovery and recognition of problems, evaluation of problems and procedures, types and techniques of research.

791. **Research.** 1-6 hrs. arr. **Q.**

792. **Special Problems. 3-0-0-Q.**

796. **Practicum I, II, III.** 2-6 hrs. arr. **Q.** Research in special physiological problems.

797. **Independent Study. 3-0-0-Q.** Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a dissertation and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

801, 802, 803. **Physiological Effects of Motor Activity.** 3-9 hrs. arr. **Q.** An opportunity to reach a deeper understanding of various physiological effects of activity while pursuing a particular interest.

804. **Principles of Design and Construction of Test in Physical Education. 3-4-0-W,Su.** Prerequisite: Proficient background in measurement and evaluation or permission of instructor. Techniques and procedures in designing and constructing test in physical education.

840. **Readings in Physical Education. 3-4-0-W.** Extensive reading and discussion of physical education literature.

898. **Dissertation.**

PHYSICS (PHY-360)

542. **The Physics of Waves. 3-4-0-S.** Prerequisite: Mechanics. Transverse waves, waves on a membrane, theory of elasticity, acoustic waves, diffraction and spectrum analysis of waveforms.

561. **Modern Physics. 3-4-0-F.** Prerequisite: PHY 362 and mechanics. Electromagnetic waves, electron emission, X-radiation, relativity, quantum theory,

spectroscopy, wave mechanics, atomic and nuclear structure, and cosmic rays.

562. **Modern Physics.** 3-4-0-W. Prerequisite: PHY 362 and mechanics. Electromagnetic waves, electron emission, X-radiation, relativity, quantum theory, spectroscopy, wave mechanics, atomic and nuclear structure, and cosmic rays.

563. **Modern Physics.** 3-4-0-S. Prerequisite: PHY 362 and mechanics. Electromagnetic waves, electron emission, X-radiation, relativity, quantum theory, spectroscopy, wave mechanics, atomic and nuclear structure, and cosmic rays.

564. **Fundamentals of Solid State Physics.** 3-3-3-S. Prerequisite: Permission. The basic physical processes which occur in solids, with emphasis on semiconductors and metals.

565. **Nuclear Physics.** 3-3-3-S. Prerequisite: PHY 362. Nuclear binding forces, chain reaction, criticality, the non-steady state reactor, radiation shielding and detection.

566. **High Vacuum Technique.** 3-4-0-F. Prerequisite: Permission. Design of vacuum instruments. Study of mechanical, diffusion, ion, sorption, and getter pumps.

567. **Analysis by Mass Spectrometer.** 3-4-0-W. Prerequisite: Permission. Interpretation of mass spectrometer. Sample introduction, and mass analysis.

577. **Meteorology.** 3-4-0-X. Prerequisites: CHE 103 and PHY 103 or equivalent. General circulation, vertical structure, radiation heating, and cooling with gravity-density effect on moisture, as well as large scale motion.

585. **History and Literature of Physics.** 3-4-0-X. A survey of the history of physics from ancient times to 1900, stressing the rise and fall of concepts.

691. **Research in Physics.** 1-6 hrs. arr. X.

697. **Independent Study and Research.** 1-6 hrs. arr. X. Not to be counted as credit toward degree. Students who are not in residence but who are actively working on a thesis and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

698. **Thesis.** 6 hrs. arr. X.

701. **Theoretical Physics.** 3-4-0-F. Prerequisite: Permission. Selected topics of general physics from an advanced point of view. Generally mathematical development of basic physical concepts.

702. **Theoretical Physics.** 3-4-0-W. Prerequisite: Permission. Selected topics of general physics from an advanced point of view. Generally mathematical development of basic physical concepts.

703. **Theoretical Physics.** 3-4-0-S. Prerequisite: Permission. Selected topics of general physics from an advanced point of view. Generally mathematical development of basic physical concepts.

705. **Special Topics in Theoretical or Experimental Physics.** 3-4-0-S,Su. Prerequisite: Permission. Subjects which may be studied under this heading depend upon current interest of students and staff. Will ordinarily be in areas for which no formal courses are offered.

710. **Astronomy for Teachers.** 3-3-3-S. Prerequisite: Permission. Lectures, demonstrations, and discussions covering selected topics in solar-system and stellar astronomy. Emphasis is placed on those concepts pertaining to science teaching in the secondary schools.

740. **Electron Optics and its Applications.** 3-4-0-S. Prerequisite: Permission.

Electrostatic and magnetic lenses, electron microscopes, TV tubes, and oscilloscopes. Image converters. Spectrometers.

750. **Quantum Mechanics I.** 3-3-4-X. Prerequisite: Permission. The Schroedinger equation, operators and eigenfunctions, spherically symmetric systems, scattering theory, matrix mechanics, angular momentum and spin, perturbation theory and identical particles.

751. **Quantum Mechanics II.** 3-3-4-X. Prerequisite: Permission. The Schroedinger equation, operators and eigenfunctions, spherically symmetric systems, scattering theory, matrix mechanics, angular momentum and spin, perturbation theory and identical particles.

789. **Seminar I.** 1-0-2-F. Prerequisite: Consent of the chairman of the department. This course will be devoted to the study of current literature in physics and may be supplemented by laboratory research.

789. **Seminar II.** 1-0-2-W. Prerequisite: Consent of the chairman of the department. This course will be devoted to the study of current literature in physics and may be supplemented by laboratory research.

789. **Seminar III.** 1-0-2-S. Prerequisite: Consent of the chairman of the department. This course will be devoted to the study of current literature in physics and may be supplemented by laboratory research.

789. **Seminar IV.** 1-0-2-Su. Prerequisite: Consent of the chairman of the department. This course will be devoted to the study of current literature in physics and may be supplemented by laboratory research.

POLITICAL SCIENCE (PS-280)

501. **American Political Process.** 3-4-0-F. An analysis of the American political system on an advanced level.

502. **Municipal Government.** 3-4-0-F.

504. **The Legislative Process.** 3-4-0-S.

506. **American Political Parties and Pressure Groups.** 3-4-0-W,S,Su.

507. **Mississippi Government.** 3-4-0-W,Su.

508. **The Presidency and Congress.** 3-4-0-W. A study of the interplay of roles and functions, powers and pressures among the President, the Bureaucracy, and the Congress.

509. **Southern Politics.** 3-4-0-S. An examination of the politics and political culture of the southern states.

520. **Political Theory to Locke.** 3-4-0-F.

521. **Political Theory Locke to Present.** 3-4-0-S.

525. **American Political Theory.** 3-4-0-W,Su.

531. **International Organization.** 3-4-0-X.

532. **Politics of the Power Blocs.** 3-4-0-S. An intensive analysis of the pattern of politics resulting from the formation of the two major power blocs and lesser blocs.

534. **Inter-American Politics.** 3-4-0-W. A study of hemisphere relations, with emphasis on the United States and Latin America, bilaterally and multilaterally.

535. **Soviet Foreign Policy.** 3-4-0-F.

550. **Governments and Politics of Western Eruope.** 3-4-0-S.

551. **Soviet Government and Politics.** 3-4-0-W.
552. **British Government and Politics.** 3-4-0-F,Su.
553. **Middle Eastern Governments and Politics.** 3-4-0-W.
554. **Far Eastern Governments and Politics.** 3-4-0-S.
555. **Tropical African Governments and Politics.** 3-4-0-X.
556. **Latin American Governments and Politics.** 3-4-0-F,Su.
558. **Latin American Political and Economic Development.** 3-4-0-X.
570. **Public Administration.** 3-4-0-F,W.
571. **Public Personnel Administration.** 3-4-0-F.
572. **Organization and Management.** 3-4-0-S.
573. **Policy Formation.** 3-4-0-S.
580. **United States Constitutional Law.** 3-4-0-Q.
581. **The Judicial Process.** 3-4-0-F,S,Su.
582. **Comparative Judicial Politics.** 3-4-0-S. Prerequisite: PS 580 or PS 581 or consent of instructor.
585. **International Law.** 3-4-0-W.
691. **Research in Political Science.** 1-9 hrs. arr. Q.
692. **Special Problems.** 1-3 hrs. arr. Q. The student works individually on a paper in political science under the supervision of a graduate faculty member.
697. **Independent Study and Research.** Hrs. arr. X. Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a thesis and consulting with the major professor or making use of the library or other University facilities must enroll in this course.
698. **Thesis.** 6 hrs. arr. Q.
700. **Seminar in U.S. Government.** 3-0-0-F,Su. May be taken twice for credit. Prerequisite: Course in American national, state, and local government or consent of instructor.
720. **Scope and Methods.** 3-0-0-F. A survey of the scope of political science and of the tools and methods utilized in the discipline.
721. **Seminar in Political Theory.** 3-0-0-W. May be taken twice for credit.
723. **Communist Ideology.** 3-0-0-Su. A critical study of materials from the basic writings of Communist thinkers: Marx, Lenin, Stalin, and Mao, with attention to modification made from period to period.
730. **Seminar in U.S. Foreign Relations.** 3-0-0-W. May be taken twice for credit. Prerequisite: Another course in U.S. foreign policy or history of U.S. foreign policy or consent of instructor. A survey of current United States foreign policies and problems.
731. **Seminar in International Relations.** 3-0-0-S. May be taken twice for credit. An intensive survey and analysis of the methodology, literature, and substance of the process of trans-state politics.
750. **Seminar in Comparative Government and Politics.** 3-0-0-S. May be taken twice for credit. Prerequisite: One or more courses in comparative government or consent of the instructor. A research-type course in which each student will make an intensive study of the political institutions of one country, or of a group of countries having similar governments.
751. **Seminar in Latin America.** 3-0-0-X. May be taken twice for credit. Prerequisite: Two Latin American political science or history courses at the 500

level or consent of the instructor. A research-type course in which each student will make an intensive inquiry into Latin American governments and politics.

770. **Regulatory Commissions.** 3-0-0-W. A study of the federal independent regulatory commissions.

781. **Seminar in Public Law.** 3-0-0-S. May be taken twice for credit. Prerequisite: A course in constitutional law or consent of the instructor. A research course in which the students examine in depth various aspects of the judicial system and its relationship to other elements in the political process.

791. **Research in Political Science.** 1-9 hrs. arr. Q. Prerequisite: Approval of the major professor.

792. **Special Problems.** 1-3 hrs. arr. Q.

797. **Independent Study and Research.** Hrs. arr. X. Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a dissertation and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

898. **Dissertation.**

POLYMER SCIENCE (PSC-370)

540. **Drug Identification.** 3-4-0-W,S,X. Lectures, demonstrations, and discussions will cover all aspects of drug identification, particularly as would be important to a law enforcement officer. This does not count toward a degree in polymer science.

698. **Thesis.** 6-0-0-X.

701, 702, 703. **Advanced Polymer Science.** 3-4-0-(701F, 702W, 703S). An in-depth study of polymer forming reactions, their scope and limitation. Relationships between Mn, Mw, polymer structure and conformation to physical properties of polymers.

710. **Characterization of Polymeric Materials.** 3-4-0-F. To include such topics as light scattering, end group analysis, osmometry, polymer fractionation, NMR, I.R., U.F., and visible spectroscopy, thermopolymer fractionation, NMR, I.F., U.V., and visible spectroscopy, thermoanalytical evaluation and mass spectrometry.

711, 712. **Advanced Physical Polymer Science I, II.** 3-4-0-(711W, 712S). A study of polymer chain conformation, macromolecular solutions, molecular weight distribution, morphology, rheology, structure-property relationships, and kinetics of addition, condensation and copolymerication.

720, 721, 722. **Polymer Techniques I, II, III.** 2-1-3-(720F, 721W, 722S). Laboratory methods of polymer synthesis, structural determination, and characterization.

730. **Stereoregular Polymerization.** 3-4-0-X. Prerequisite: Permission of instructor. A study of the synthesis, characterization, and mechanisms operating in the formation of stereoregular polymers.

732. **Copolymerization.** 3-4-0-X. Prerequisite: Permission of instructor. Methods of controlling copolymer compositions, characterization, and utilization of copolymer compositions.

770, 771. **Organic Coatings.** 3-4-0-X. A systematic study of the science of surface coatings.

780, 781. **Selected Topics in Polymer Science.** 3-4-0-X. To include a survey of such topics as thermally stable polymers, conducting polymers, silicone polymers, electro-deposition polymers, radiation curing of polymers and the like.

789. **Polymer Science Seminar.** 1-1-0-Q.

791. **Research in Polymer Science.** Hrs. arr. X.

797. **Independent Study and Research.** Hrs. arr. X. Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a dissertation and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

898. **Dissertation.**

PSYCHOLOGY (PSY-175)

518. **History and Systems of Psychology.** 3-4-0-F,S. Prerequisite: Permission of the instructor. Review of the history of psychology and intensive study of current systems of psychology. Primarily for psychology majors as final senior course.

520. **Sensation and Perception.** 3-4-0-W. Prerequisite: PSY 320. A survey of sensory and perceptual processes with emphasis on the visual system.

522. **Psychology of Learning.** 3-4-0-F,S. Prerequisite: PSY 320. A study of the basic problems, theories, concepts, and research in the areas of human and animal learning.

524. **Animal Psychology.** 3-4-0-X. Prerequisite: PSY 320. An introduction to the study of animal behavior with special emphasis on the comparison of psychological processes along the phylogenetic scale.

526. **Physiological Psychology.** 3-4-0-F,S,Su. Prerequisite: PSY 110. Relationships between physiological functions and psychological functions, including emotion, motivation and learning.

536. **Abnormal Psychology.** 3-4-0-F,W. Prerequisites: Good background in psychology and permission of the instructor. Study of the major psychoses, the psychoneuroses, and mental deficiency.

550. **Social Psychology.** 3-4-0-W,Su. Prerequisite: PSY 110. Study of the individual in group situations, and the influence of the social environment on his behavior and development.

551. **Industrial Psychology.** 3-4-0-F,S. Prerequisite: PSY 110. Applications of psychological principles and methods to problems of industry.

555. **Psychology of Personality.** 3-4-0-F,W,Su. Prerequisites: PSY 110 and permission of the instructor. A study of the factors involved in the development of the mature personality, with an analysis of the structure and dynamics of personality.

562. **Psychological Measurement.** 3-4-0-W,Su. Prerequisites: PSY 110 and 360 or equivalent. Theory, problems, and techniques of psychological measurement. Group tests of ability, aptitude, interests, and personality are emphasized.

620. **Advanced Experimental Psychology.** 2-1-3-X. May be taken twice for

credit. Critical evaluation of and use of a variety of experimental techniques. Each student conducts an original study.

691. **Research in Psychology.** 1-9 hrs. arr. **Q.**

692. **Special Problems, I, II, III.** 1-3 hrs. arr. **Q.**

694. **Seminar in Problems in Contemporary Psychology, I, II, III.** 1 hr. arr. **Q.** Limit of three semester hours.

697. **Independent Study and Research.** 3 hrs. arr. **Q.** Not to be counted as credit toward a degree. Students not in residence but actively working on a thesis and consulting with the major professor or using University facilities must enroll in this course.

698. **Thesis.** 6 hrs. arr. **Q.** Credit deferred until thesis is completed.

710. **Philosophy of Science.** 3-4-0-**X.** A study of scientific methodology, theory construction, and system building in modern psychology.

721. **Research Evaluation in the Behavioral Sciences.** 3-4-0-**F.** Seeks to develop skill in evaluating the methodological soundness and usefulness of behavioral science research.

722. **Experimental Design.** 3-4-0-**S.** A study of the rationale underlying the selection of appropriate design for experimental work and the analysis and interpretation of results.

723. **Comparative Psychology.** 3-4-0-**X.** An examination of methodology employed in animal research, and results of experimentation in the area of animal behavior.

724. **Physiological Psychology.** 3-4-9-**W.** Study of neurophysiological mechanisms in behavior, and related problems.

725. **Motivation.** 3-4-0-**X.** Prerequisite: EPY 720 or EPY 721. A study of the current theories and research in the area of human and animal motivation.

726. **Perception.** 3-4-0-**F.** Prerequisite: Permission of the instructor. The development and nature of human perception and its relation to adaptive behavior.

728. **Advanced Experimental Psychology I, II, III.** 3-9 hrs. arr. **X.** For graduate students who wish to conduct publishable research not a part of a graduate thesis. Limit of 9 semester horrs.

733. **Psychological Externship.** 1-3 hrs. arr. **Q.** To be taken concurrently with PSY 736 or PSY 782. Open only to psychology majors, and with permission of the instructor. Supervised clinical experience in community and hospital settings. Limit of 15 semester hours.

734. **Principles of Behavior Modification.** 3-4-0-**W,Su.** Prerequisite: Permission of the instructor. An intensive study of the principles of behavioral change and the evaluation of educational and clinical research in behavior modification.

735. **Clinical Psychology.** 3-4-0-**F.** Prerequisite: Permission of the instructor. Survey course to acquaint the student with the field of clinical psychology, personality diagnosis, psychotherapeutic techniques, and research.

736. **Pre-Practicum in Clinical Psychology.** 1-3 hrs. arr. **Q.** Prerequisites: PSY 738, 787, or 788, and permission of the instructor. Open only to psychology majors planning to enter the clinical field.

737. **Administration, Supervision, and Consultation in Psychology.** 3-4-0-**Su.** Prerequisite: PSY 736 and permission of the instructor. Required for clinical

doctoral students. A professional course to provide the student with knowledge of techniques of administration, supervision, and consultation in a mental health setting.

738. **Introduction to Personality Assessment.** 1-3 hrs. arr. **X.** Prerequisite: Permission of instructor. Introduction to the theory and use of various psychological tools, including objective and projective devices as well as interviewing techniques.

739. **Personality Assessment.** 3-4-0-**F.** Prerequisites: PSY 738 and permission of instructor. A study of the theory and practice in the selection, administration, and interpretation of tests used in assessment of personality.

742. **Seminar in Case Studies.** 3 hrs. arr. **X.** Prerequisite: Permission of the instructor and 9 hours of psychological testing courses. Presentation of actual case studies for evaluation and discussion by advanced graduate students. Recommended to be taken with PSY 782.

751. **Personnel and Industrial Psychology.** 3-4-0-**S.** Intensive study of selected problems in industrial and personnel psychology.

752. **Management Training and Development.** 3-4-0-**X.** Study of the principles and techniques of management appraisal and training.

755. **Personality.** 3-4-0-**S.** Consideration of the major theories of personality, and research on the development and measurement of personality.

762. **Research Methods: Descriptive Statistical Methods.** 3-4-0-**F.** Prerequisite: PSY 360 or permission of the instructor. A survey of central statistical concepts and data analysis techniques, e.g., probability, hypothesis testing, correlation and regression.

763. **Research Methods: Significance Tests and Experimental Designs.** 3-4-0-**W.** Prerequisite: PSY 762 or permission of the instructor. Experimental design and analysis of variance, multiple correlation and regression.

764. **Factor Analysis.** 3-4-0-**Su.** Methods of multivariate analysis, emphasizing methods of factor analysis and cluster analysis.

768. **Advanced Psychological Measurement.** 3-4-0-**X.** Prerequisite: PSY 762 (PSY 462 or 562 is recommended). An intensive study of the theory and techniques of psychological measurement. Reliability, validity, test construction and scaling are emphasized.

778. **Experimental Child Psychology.** 3-4-0-**S.** Prerequisite: PSY 320 or permission of the instructor. An intensive study of theory, methodology, and research in child psychology.

779. **Seminar in Developmental Psychology.** 3-4-0-**X.** Prerequisite: Permission of the instructor. Consideration of specific contemporary problems and issues in developmental psychology. May be taken for a total of 9 semester hours.

780. **Advanced Psychopathology.** 3-4-0-**W.** Prerequisites: PSY 436, PSY 755, and permission of the instructor. Intensive study of personality dynamics as related to aberrant behavior, with emphasis on current research.

782. **Clinical Psychology Practicum, I, II, III.** 3-1-6-**Q.** Prerequisites: PSY 738, PSY 787, PSY 788, and permission of the instructor. Open only to psychology majors at the doctoral level. An analysis of the interrelations between behavior disorders and psychodiagnostics; selection and application of appropriate therapeutic programs.

784. **Systems of Psychotherapy.** 3-4-0-X. Prerequisites: PSY 780 and permission of the instructor. An analysis of the theories and techniques of current systems of psychotherapy.

787. **Individual Psychological Testing: Stanford-Binet.** 3-2-4-F,S. Supervised study of the administration of the Stanford-Binet, Form L-M and the interpretation and application of test results.

788. **Individual Psychological Testing: Wechsler Scales.** 3-2-4-W,Su. Prerequisite: Approval of department head or instructor. Supervised study of the administration of the Wechsler Scales and the interpretation and application of test results.

796. **Internship in Clinical Psychology.** 3 hrs. arr. Q. Credit may not be applied toward a graduate degree. Prerequisite: Successful completion of clinical psychology practicum and approval of Director of Clinical Psychology Training. Required calendar year of internship in mental health setting approved by the American Psychological Association.

797. **Independent Study and Research.** 1-9 hrs. arr. Q. Not to be counted as credit toward a degree. Students not in residence but actively working on a dissertation and consulting with the major professor or using University facilities must enroll in this course.

898. **Dissertation.** 3 hrs. arr. X.

PUBLIC ADDRESS (PA-216)

500. **Symbolic Function in Persuasion.** 3-4-0-S, 1974, and alternate years.

503. **Political Campaign Rhetoric.** 3-4-0-F election years.

511. **Workshop in Directing Forensics Programs.** 3-4-0-Su.

512. **Workshop in Coaching Debate and Platform Events.** 3-4-0-Su.

650. **History and Criticism of American Public Address.** 3-4-0-Su, 1974, and alternate years.

RADIO-TELEVISION-FILM (RTF-220)

516. **Radio Station Management.** 3-4-0-F, 1975, and alternate years.

525. **Audience Analysis.** 3-4-0-S.

547. **Television Production Workshop.** 2-2-2-S.

560. **Issues in Broadcasting.** 3-4-0-F, 1975, and alternate years.

577. **Advanced Film Production Workshop.** 2-2-2-S.

692. **Special Problems in Radio and Television.** 3-4-0-X.

RECREATION (REC-735)

513. **Organization and Administration of Public Recreation.** 3-4-0-F,W.

515. **Business Procedures for Parks and Recreation.** 3-4-0-F.

517. **Park Management and Operation.** 3-4-0-F.

522. **Youth Service Programs and Organization.** 3-4-0-F.
524. **Community Center and Playground Programs and Operation.** 3-4-0-X.
526. **Community-School Recreation.** 3-4-0-S.
532. **Environmental Aspects of Recreation.** 3-4-0-W.
534. **Park Development and Design.** 3-4-0-S.
536. **Park and Recreation Planning Methodology.** 3-4-0-W.
541. **Resources Management and Policy.** 3-4-0-W.
543. **Outdoor Education.** 3-4-0-S.
547. **Interpretation of Cultural and Natural Resources.** 3-4-0-S.
551. **Therapeutic Recreation Programming.** 3-4-0-W.
552. **Gerontology and Recreation for Later Years.** 3-4-0-F,S.
691. **Research.** 1-9 hrs. arr.
692. **Special Problems.** 1-0-0-Q.
694. **Field Problems.** 1-6 hrs. arr.
696. **Practicum.** 1-6 hrs. arr.
697. **Independent Study.** 1-9 hrs. arr. X. Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a thesis and consulting with the major professor or making use of the library or other University facilities must enroll in this course.
698. **Thesis.** 6-0-0-Q. Selected with approval of the department faculty.
701. **Problems and Emerging Trends in Recreation.** 3-4-0-F.
702. **Research and Evaluation in Parks and Recreation.** 3-4-0-F.
703. **Philosophical Foundations of Recreation.** 3-4-0-W.
704. **Special Field Studies in Recreation.** 3-4-0-S.
740. **Forest Recreation.** 3-4-0-F.
790. **Seminar in Recreation.** 2-2-0-W.
791. **Research in Recreation.** 1-9 hrs. arr. X.
792. **Special Problems.** 3-0-0-Q.
797. **Independent Study and Research.** 1-9 hrs. arr. X. Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a dissertation and consulting with the major professor or making use of the library or other University facilities must enroll in this course.
898. **Dissertation.**

RELIGION (REL-288)

532. **A History of the Christian Church I.** 3-4-0-W. A study of the history of the church from the apostolic period through the Renaissance.
533. **A History of the Christian Church II.** 3-4-0-S. A study of the church from the Reformation to the modern era.
534. **Primitive Religion.** 3-4-0-X. Belief and ritual in primitive society.
535. **Religious Literature and Thought of the Near East.** 3-4-0-W. A study of Judaism, Zoroastrian, and Islamic literature and thought.
537. **Religious Literature and Thought of the Far East.** 3-4-0-S. A study of Hinduism, Buddhism, Taoism, Confucianism, and Shintoism.

SCIENCE (SCI-394)

522. **Geophysical Well-Logging.** 3-2-4-F. Application of well-logging techniques to petroleum exploration, groundwater investigations and soil studies.

526. **Advanced Geophysics.** 3-3-1-S. Prerequisites: PHY 103 or 203 and permission. Corequisite: MAT 277. A development of the physical principles governing gravity, electricity, and magnetism, and seismic wave propogation.

682. **Digital Data Switching.** 3-4-0-X. Prerequisite: Permission. Course provides investigation, and discussion of the concepts of computer hardware, software, supervisory systems and their interrelationships.

684. **Voice Switching.** 3-4-0-X. Prerequisite: Permission. Modern telephone switching systems.

686. **Radar and Navigational Aids.** 3-4-0-X. Prerequisite: Permission. Radar and other navigational aids.

SCIENCE EDUCATION (SCE-330)

553. **Earth and Environmental Science for Intermediate School Teachers.** 3-4-0-X. Prerequisite: Earth and environmental science background or permission of instructor. To familiarize teachers with the materials, methods, and techniques developed by the national curriculum projects.

554. **Biological Sciences for Intermediate School Teachers.** 3-4-0-F. An examination of the subject matter, techniques, and methods of teaching the life sciences in a locally structured, student-oriented classroom.

555. **Physical Science for Intermediate School Teachers.** 3-4-0-W. An examination of the subject matter, techniques, and methods for teaching the various physical sciences.

570. **BSCS — Biology for Secondary Teachers.** 3-4-0-S. Prerequisite: Biology background or permission of instructor. A critical survey of the philosophy, techniques, and methods of teaching biology as proposed by the Biological Sciences Curriculum Study.

571. **CHEM — Chemistry for Secondary Teachers — Methods and Techniques.** 3-4-0-Su. Prerequisite: Chemistry background or permission of instructor. Course designed to familiarize chemistry teachers with materials, methods, and techniques of teaching chemistry developed by the CHEM Study committee.

572. **PSSC — Physics for Secondary Teachers — Methods and Techniques.** 3-4-0-X. Prerequisite: Physics background or permission of instructor. Course designed to familiarize physics teachers with methods, materials, and techniques of teaching physics.

698. **Thesis.** 6-0-0-Q.

700. **Science Curriculum in the Public Schools.** 3-4-0-F. Prerequisite: Permission of instructor. Involves a critical examination of the research, its implications, and trends in science course content.

701. **Problems in Science Teaching.** 3-4-0-W. Prerequisite: Permission of instructor. Study of problems related to curriculum, methodology, activities,

professionalism — scientific and educational — and evaluation in science teaching.

702. **Techniques of Demonstrating and Experimenting with Scientific Principles.** 3-4-0-X. For general science teachers, considering fundamental aspects of biology, chemistry, geology, and physics.

730. **Physics for Elementary School Teachers.** 3-4-0-Su. Prerequisites: 6 hours in physical science and 6 hours in biological science. Organized around principles and general ideas that can be directly applied to the elementary grade.

731. **Chemistry for Elementary School Teachers.** 3-4-0-S. Prerequisites: 6 hours in physical science and 6 hours in biological science. A shift of emphasis from descriptive chemistry toward chemical principles to represent the changes in chemistry that have taken place over the last two decades.

732. **Biology for Elementary School Teachers.** 3-4-0-F. Prerequisites: 6 hours in physical science and 6 hours in biological science. A course in general modern biology emphasizing the molecular aspects of animate matter.

733. **Earth Sciences for Elementary School Teachers.** 3-4-0-W. Prerequisites: 6 hours in physical science and 6 hours in biological science. Designed to provide elementary teachers with a general relationships in space.

789. **Seminar.** 1-2-0-Q. Discussion of current trends and practices in science education; invited speakers; and discussions of prospecti and research of current studies in science education.

791. **Research in Science Education.** 1-9 hrs. arr. Q.

797. **Independent Study and Research.** 1-9 hrs. arr. X. Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a research problem or a dissertation and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

898. **Dissertation.**

SECONDARY EDUCATION (CIS-120)

570. **Curriculum of the Secondary Schools.** 2-3-0-X. A course which examines the present-day structure and nature of the secondary school curriculum.

572. **Student Activities in Secondary Schools.** 1-2-0-X. Consideration is given to the general nature, activities, and organization of the student extracurricular program.

692. **Special Problems I, II, III.** 1-0-0-X. A problem study to be approved by the department chairman to develop knowledge and facility in a field of interest of the student. Preparation of a scholarly paper is required.

694. **Field Problems.** 3-0-0-X. Prerequisite: Approval of the department chairman. This course provides students with an opportunity to study local school problems in a field setting under the supervision of a graduate professor.

697. **Independent Study and Research.** 1-9 hrs. arr. X. Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a thesis and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

698. **Thesis. 6-0-0-X.** Credit deferred until thesis is completed.

700. **Seminar in Secondary Education. 3-4-0-X.** An investigation of the major trends and objectives of the secondary school with emphasis upon the disciplinary areas of the curriculum.

701. **Algebra for Secondary Teachers. 3-4-0-F.** Consideration is given to the problems relating to the teaching of algebra and a review of special algebraic principles.

705. **Professional Subject Matter in Mathematics. 3-4-0-X.** A study of ways to enrich the teaching of high school mathematics through the introduction of basic topics and concepts of college mathematics.

706. **Geometry for Secondary Teachers. 3-4-0-X.** Consideration is given to the problems pertaining to the teaching of high school geometry and a review of special geometric principles.

707. **Materials in the Teaching of Mathematics. 3-4-0-X.** A study of materials to be used in the teaching of secondary school mathematics both in the classroom and in extraclass activities.

708. **High School Curriculum. 3-4-0-W,Su.** An overview of the field of curriculum and instruction at the secondary-school level with special emphasis upon contemporary trends.

709. **Advanced Professional Subject Matter in Mathematics. 3-4-0-X.** Prerequisite: CIS 705. A continuation of study relating to classroom enrichment procedures through the introduction of essential elements of college mathematics.

710. **Mathematics for Junior High School Teachers. 3-4-0-X.** Prerequisite: To be teaching junior high school mathematics or have at least a minor in college mathematics. Consideration is given to the problems relative to the teaching of mathematics in grades 7, 8, and 9 and to the organization of mathematical subject matter for these grades.

723. **Research and Problems in Mathematics Education. 3-4-0-X.** A seminar for experienced teachers who wish to plan developmental programs of mathematics instruction in light of recent developments.

730. **Reading and Study Improvement Techniques for the Junior and Senior College Teacher of Reading. 3-4-0-S,F.** Summarizes research, methods, and techniques of college reading programs including a practicum or internship experience in CIF 334.

737. **Practicum in Remedial Reading Instruction. 3-4-0-X.** Provides the student experiences in secondary reading diagnosis and remediation with emphasis on techniques in a practicum setting.

750. **Advanced Study of Problems and Issues in Teaching Secondary School Social Studies. 3-4-0-Su.** Explores inquiry strategies for the social studies classroom and seeks to foster a firm understanding of basic analytical concepts and principles for the experienced social studies teacher.

754. **Reading in the Secondary Schools. 3-4-0-W,Su.** A course providing for extensive study of trends in materials and methods in secondary school reading including significant research studies which relate to these.

791. **Research in Secondary Education. 1-9 hrs. arr. X.** Prerequisite: Approval of the major professor.

792. **Special Problems. 3-0-0-X.**

794. **Field Problems.** 3-0-0-X. Prerequisite: Approval of the department chairman. This course provides students with an opportunity to study local school problems in a field setting under the supervision of a graduate professor.

797. **Independent Study and Research.** 1-9 hrs. arr. X. Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a research problem or a dissertation and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

798. **Research Problem.** 3-0-0-X. Specialist degree candidates are required to select a significant educational problem for investigation and to present the findings in a scholarly paper under the guidance of a graduate committee.

898. **Dissertation.**

SOCIAL WORK (SWK-020)

610. **Determinants of Social Functioning (Micro).** 3-4-0-F. Physical, psychological, and social determinants of social functioning through life stages from infancy through old age.

611. **Determinants of Social Functioning (Macro).** 2-3-0-W. Societal resource systems (formal and informal), development and change of institutions, systems theory view of social phenomena.

612. **Small Group Theory.** 1-2-0-F. Goals, role dynamics, culture and maintenance of various types of groups, theories and research on groups.

615. **Social Problems and Social Welfare.** 3-4-0-F. A theoretical analysis of social problems and services with emphasis on poverty, illness, mental disorders, aged, and other selected topics.

617. **Scientific Inquiry.** 1-2-0-F. Problem definition, hypothesis formulation, problems of data collection, analysis of scientific decision making, limitations of scientific inquiry, elementary conceptual analysis.

618. **Social Science Concepts.** 1-2-0-W. Strategies for social policy formulation, using social science concepts to analyze and suggest methods of influence on social policy formulation.

624-629. **Personal Professional Growth.** 1 hr. each. Arr. Q. A jointly planned series of activities that will result in student growth toward autonomy and responsible social work practice.

630. **Professional Communication.** 3-4-0-W. Interviewing, making referrals, and other oral, written, and non-verbal professional communication.

631. **Leadership in Social Work.** 2-3-0-W. Directed toward development of such skills as forming groups, determining goals, involving isolates, controlling deviancy, and evaluating outcomes.

634. **Cultural Components of Social Work Practice.** 2-3-0-W. Information, values, and skills necessary in work with minority ethnic groups.

636. **Primary Skills in Macro-System Intervention.** 2-3-0-W. Purpose, structure, functions, and results of macro-systems. Developing and working within macro-systems to meet the needs of groups, organizations and institutions.

638. **Facilitative Conditions for Human Services.** 2-3-0-F. Demonstration of

competency in empathy, respect, genuineness, concreteness, confrontation, immediacy, self-disclosure.

639. **Problem Solving in the Human Services. 1-2-0-F.** Detection, analysis, data collection, assessment resources and intervention strategies, evaluation.

650. **Services to Families. 2-3-0-X.** Concepts and skills necessary for individual and group intervention with families having problems. Treatment modes for children and youth will be considered.

651. **Crisis Intervention. 1-2-0-X.** History, concepts (time limits, crisis, crisis sequence), goals, development of basic skill in crisis intervention.

652. **Task-Centered Intervention. 1-2-0-X.** Concepts and skill development in client's perception of difficulty, client goals and barriers, and steps in approaching or reaching the goal.

653. **Transactional Analysis. 2-3-0-X.** Development of basic skill in recognition and analysis of ego states (parent, adult, child), life positions, life scripts, games, etc.

656. **Reality Therapy. 2-3-0-X.** Skill in therapy utilizing concepts of relationship, self-worth, identity, responsibility, commitment, failure, loneliness, emotion, success.

657. **Supportive/Non-Directive Techniques. 2-3-0-X.** Concepts and skills for helping the person to achieve self-actualization through acceptance of new experiences, in a non-threatening and non-rejecting atmosphere.

659. **Utilization of Social Conflict. 2-3-0-X.** Functions and nature of social conflict. Parties, issues, power relations, boundaries, alliances. Skill in strategies of conflict management: Integrative, utilitarian, negotiative, coercive.

661. **Selected Social Work Roles. 2-3-0-X.** Development of basic skill in advocate, broker, outreach worker, and mobilizer roles (as defined by the Southern Regional Education Board for Social Welfare).

662. **Administration. 2-3-0-X.** Concepts and skills related to goal formulation, fund raising, budgeting, program development planning, evaluation, and public relations.

663. **Consultation. 1-2-0-X.** Concepts and development of basic skills in consultation; clarification of the client systems problem, clarification of own role, legitimize self as consultant; give alternative solutions, estimate consequences.

664. **Supervision. 1-2-0-X.** Utilize optimum administrative, teaching and learning principles and skills to facilitate quality agency services.

666. **Community Social Work. 2-3-0-X.** Concepts and skills necessary for making planned community decisions; organizing information and resources for improving, expanding or changing the community development process.

668. **Group Treatment. 2-3-0-X.** Concepts and skills related to group work practice, with special focus on group formation, assessment, intervention assessment, intervention strategies and termination.

669. **Evaluative Research — Theoretical Basis for Evaluation of Practice. 1-2-0-X.** Surveys, participant observation, experiments; applied research; description versus judgment; estimation of goal achievement; analysis of intents, transactions and outcomes.

671. **Field Instruction.** 6 hrs. arr. X. A four-day week practicum to demonstrate and practice skills learned in classes, plus those necessary for practice in a given agency.

672. **Field Instruction.** 6 hrs. arr. X. A continuation of SWK 671.

673. **Field Instruction.** 6 hrs. arr. X. A continuation of SWK 672.

680. **Seminar on Social Work Practice and Services in Mental Health and Retardation Settings.** 2-4 hrs. arr. X. Problems, policy, programs, services, and evaluation of intervention and programs in mental health/retardation. Development of specific skills relevant to mental health and retardation.

681. **Seminar in Public Social Services Practice.** 2-4 hrs. arr. X. Public welfare as an institution, historical development, policy and procedures, political processes and the role of local, state, and federal government, funding, manpower and staff development.

682. **Seminar on Social Work with the Aged.** 2-4 hrs. arr. X. Learning will be centered in the psycho/social/physical components of aging, principles of development of community services, and specific direct practice skills relevant to aging.

683. **Seminar in Social Work in the Health Field.** 2-4 hrs. arr. X. A seminar on medical data, terminology, and skills related to social work as it is practiced in hospitals, out-patient clinics, and other health settings.

684. **Seminar in Management and Administration.** 2-4 hrs. arr. X. Students choose selected management and administrative skills such as staff and program development, monitoring organizational and service delivery systems, persuasion and political behavior.

691. **Individualized Study on Evaluation of Practice.** 1-3 hrs. arr..X. Students will select an area of interest in practice and carry out an evaluative study during the final field placement. Preparation of a scholarly paper is required.

692. **Special Problems.** 1-3 hrs. arr. X. A problem study to be approved by the departmental chairman to develop knowledge and facility in a field of interest of the student. Preparation of a scholarly paper is required.

SOCIOLOGY (SOC-292)

520. **Industrial Sociology.** 3-4-0-S. An advanced sociological study of industrial and business units as social systems in their institutional setting.

524. **Gerontology.** 3-4-0-W. Sociology of aging.

526. **Sociology of Education.** 3-4-0-Su.

540. **Social Control and Collective Behavior.** 3-4-0-W. A study of principles and techniques by which conformity to the laws and other norms of social units is produced and maintained.

544. **Juvenile Delinquency.** 3-4-0-F,S. A study of causes and the nature of juvenile delinquency, the development of the juvenile court, probation, and other rehabilitative programs.

550. **Social Foundations of Personality.** 3-4-0-W,Su. A treatment of the role of the social group and the cultural heritage in the development and functioning of the human personality.

560. **Methods of Social Research. 3-4-0-F,S.** A survey of elementary research techniques used in empirical social investigations.

561. **Population. 3-4-0-W.** Prerequisite: SOC 460. An introduction to demography analyzing significant changes in population composition.

571. **Social Institutions. 3-4-0-S.** A detailed study of major American social institutions, their functions, interrelationships, and significant trends.

580. **Advanced General Sociology. 3-4-0-F,S.** An advanced course in general sociology giving expanded treatment to the basic sociological concepts and subject-matter areas.

581. **History of Social Thought. 3-4-0-F.** An examination of early social thought, tracing the development of western thought and ideas from Hammurabi to Comte.

582. **Sociological Theory. 3-4-0-W,Su.** A survey of the growth and development of sociological theory from Comte to the present.

680. **Departmental Seminar. 1-2 hrs. arr. Q.** May be repeated once for a total of two semester hours.

692. **Special Study Projects in Sociology. 1-6 hrs. arr. Q** (Tutorial). Special projects in reading, survey, or research in sociology. Work will be under the direction of graduate faculty.

697. **Independent Study and Research. Hrs. arr. Q.** No credit toward a degree. Students not in residence but who are actively working on a thesis and consulting with a major professor or using library or other University facilities must enroll in this course.

698. **Thesis. 6-0-0-Q.** Credit will not be recorded until thesis is accepted by the major professor.

720. **American Community Life. 3-4-0-F.** A study of American community life and its social and cultural patterns.

740. **Social Control and Social Change. 3-4-0-F.** A study of the forms of social control. Independent research projects are reported to the class for discussion and evaluation.

770. **Seminar in Sociological Theory. 3-4-0-W.** A detailed study of the content and influence of selected major contributors to sociological theory.

771. **Social Institutions. 3-4-0-W.** An advanced course in social institutions. A study of the structure and function of the five basic institutions. Each student will select one for intensive study.

777. **Seminar In Demography. 3-4-0-Su.** Designed to develop understanding of data and trends in world and national population and to provide basis for assessing demographic implications of social and scientific change.

792. **Special Study Projects in Sociology. 1-6 hrs. arr. Q** (above the master's level). Special projects in reading, survey, or research in sociology. Work will be under the direction of graduate faculty.

SPECIAL EDUCATION (SPE-190)

500. **The Psychology and Education of the Exceptional Child. 3-4-0-Q.** Considers the psychological and educational needs of children in atypical group.

503. **Educational Evaluation of Exceptional Children. 3-4-0-Q.** Basic principles

underlying measurement and evaluation in education with emphasis on interpretation as it relates to exceptional children.

511. **Speech and Hearing Problems of the Classroom Teacher.** 3-4-0-W,Su. This course is designed to familiarize the educator with speech and hearing problems often found in the public school classroom.

520. **Physiology and Hygiene of the Eye.** 3-4-0-S. Identification, function, and care of the eye as it relates to the visually handicapped.

521. **Methods and Materials in Teaching the Visually Handicapped.** 3-4-0-F. An examination of specific areas of emphasis and modifications in approaches and materials for the visually handicapped.

522. **Braille.** 3-4-0-F. Introduction to Braille and the Braille system of communication in reading and writing.

523. **Teaching of Braille.** 3-4-0-W. An introduction to the teaching and processes involved in student uses of the Braille system.

524. **Special Adjustments for Visually Handicapped.** 3-4-0-W. An introduction to mobility training and orientation to movement for the visually handicapped.

525. **Education and Psychology of the Visually Handicapped.** 3-4-0-F. A consideration of psychological aspects of non-sighted individuals. Developmental areas are emphasized including assessment.

528. **Psychology and Education of the Physically Handicapped.** 3-4-0-W. A study of major handicapping conditions and their adaptations; social, emotional, and intellectual considerations are included.

529. **Curriculum for the Physically Handicapped.** 3-4-0-S. A study of educational programs for the physically handicapped.

530. **Learning Disabilities.** 3-4-0-Q. A study of the social, emotional, physical, and intellectual characteristics of learning disabled; methods of diagnosis and organization.

532. **Methods and Materials for Teaching Learning Disabilities.** 3-4-0-X. A study of methods and materials most useful in teaching children with learning disabilities. A variety of media and methods will be emphasized.

540. **Psychology and Education of the Mentally Retarded.** 3-4-0-Q. A study of the social, emotional, physical, and intellectual characteristics of the mentally retarded; methods of diagnosis and organization.

542. **Methods and Materials for Teaching the Mentally Retarded.** 3-4-0-X. A study of methods and materials most useful in teaching the mentally handicapped.

590. **Workshop in Special Education.** 3-4-0-X. Workshop in selected areas of special education.

680. **Advanced Practicum in Special Education.** 3-9 hrs. arr. X. Practicum for master's degree students unique to individual program plans. The practicum will be either in public school, institution, or clinical setting.

691. **Research in Special Education.** 1-9 hrs. arr. X.

692. **Special Problems.** 1-1-0-X. Examination of medical, sociological, biological, psychological, and institutional aspects of exceptional children.

694. **Field Problems.** 3-1-4-X.

700. **Issues in Special Education.** 1-1-0-Q. A study of current theories, models, programs, and reports in special education. Open to non-majors.

701. **Problems in Special Education Research Design.** 3-4-0-**Q.** Primary emphasis is placed for graduate degree candidates to develop a prospectus for a field study or dissertation; includes research procedures.

703. **Teaching Techniques/Curricula Laboratory in Special Education.** 3-1-4-**Q.** Curricula observations, module building, and simulations; includes material laboratory work.

704. **Perceptual-Motor Development for the Handicapped.** 3-2-2-**W,Su.** Emphasis on receptive and expressive language research and programs relating to the handicapped.

709. **Advanced Psycho-Educational Evaluation of the Exceptional Child.** 3-4-0-**F,S,Su.** Interpretation and application of measurement for exceptional children with emphasis on curriculum decision making. Open to non-majors.

730. **Issues in Extreme Learning Disorders.** 3-4-0-**W,Su.** A theoretical and philosophical study of concepts related to neurological factors, dyslexia, and the autistic in learning disorders.

731. **Advanced Methods in Learning Disabilities.** 3-4-0-**F,Su.** Study of developing individual programs for specific learning disabilities. This course meets certification requirements.

740. **Advanced Studies in Mental Retardation.** 3-4-0-**F,Su.** Problems of diagnosis and treatment. Investigation of current research, curricula design, and social emotional parameters are considered.

741. **Vocational Education in Mentally Retarded.** 3-4-0-**W.**

743. **Advanced Curriculum Studies for the Mentally Retarded.** 3-4-0-**W,Su.** Study of different approaches to curriculum development, with emphasis on materials and goals for teaching mentally retarded.

750. **The Psychology and Education of the Emotionally Disturbed.** 3-4-0-**F,Su.** This course explores the characteristic of deviant behavior and its causation; observation of the emotionally disturbed is required.

751. **Problems and Methodologies for the Socially Maladjusted.** 3-4-0-**W,Su.** This course explores educational programs for the disadvantaged, delinquent, migrant, and other socially deviant groups.

752. **Basic Curriculum for the Emotionally Disturbed.** 3-4-0-**S,Su.** A course investigating programs, methods, and materials in the education of the emotionally disturbed child; the role of the teacher in relation to team.

760. **Methods and Materials in Teaching the Gifted.** 3-4-0-**S,Su.** A study of programs, curricula, models, and methodologies for the intellectually advanced.

770. **Administration and Supervision of Program for Exceptional Children.** 3-4-0-**S,Su.** Designed for educators and supervisors of programs for exceptional children; organization and administration of programs for exceptional children.

791. **Research in Special Education.** 1-12 hrs. arr. **X.** Prerequisite: Approval of the major professor.

792. **Special Problems.** 3-4-0-**X.**

794. **Field Problems in the Administration of Special Education.** 1-6 hrs. arr. **X.** Participation in activities of an organization involved in administering or teaching special education. This may be at the state or local level.

797. **Independent Study and Research.** Hrs. arr. **X.** Not to be counted as credit toward a degree. Students who are not in residence but who are actively working

on a research problems or a dissertation and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

798. **Research Problem.** 3-4-0-X.

800. **Bio-genetic Factors in Exceptional Children.** 3-4-0-F. Study of abnormal physical and behavioral factors associated with exceptionalities; therapies related to medical models.

801. **Teacher Education in Special Education.** 3-2-2-W. Development of programs, courses of study, observation techniques, models, micro-teaching units, modules in higher education.

802. **Service Units and Public Relations in Special Education.** 3-2-2-S. In-service training units, conference planning, grant, writing, workshop, parent and national organizations.

880. **Practicum in Case Work and Guidance for the Exceptional Child.** 1-6 hrs. arr. X. Individual cases are tested by students and all available information is integrated for diagnostic and educational purposes.

898. **Dissertation.**

SPEECH AND HEARING SCIENCES (SHS-296)

501. **Language Development.** 3-4-0-F,W.

502. **Anatomy and Physiology of the Hearing Mechanism.** 3-4-0-F.

503. **Anatomy and Physiology of the Speech Mechanism.** 3-4-0-W.

514. **Stuttering and Related Problems.** 3-4-0-F,S. Prerequisite: SHS 211 or equivalent.

515. **Speech and Language Disorders of the Cerebral Palsied.** 3-4-0-W. Prerequisites: SHS 211 and SHS 403 or equivalents.

516. **Adult Aphasia and Related Problems.** 3-4-0-S. Prerequisites: SHS 211 and SHS 403 or equivalents.

517. **Speech and Language Disorders Related to Cleft Palate.** 3-4-0-Su. Prerequisites: SHS 211 and SHS 403 or equivalents.

521. **Aural Rehabilitation.** 3-4-0-F,W. Prerequisite: SHS 221 or equivalent.

531. **Language Disorders I: Assessment of Children with Language Disorders.** 3-4-0-F,W. Prerequisite: SHS 401 or equivalent.

532. **Language Disorders II: Habilitation of the Aphasic Child.** 3-4-0-W,S. Prerequisites: SHS 201 and SHS 431.

533. **Language for Deaf and Other Language-Impaired Children I.** 3-4-0-F,S.

534. **Language for Deaf and Other Language-Impaired Children II.** 3-4-0-W. Prerequisite: SHS 433.

535. **Speech for the Hard-of-Hearing and Deaf.** 3-4-0-S. Prerequisite: SHS 201.

536. **Problems in Reading and Related Subjects for the Hard-of-Hearing and Deaf.** 3-4-0-Su. Prerequisite: SHS 433 or consent of the instructor.

537. **History, Education, and Guidance for the Deaf.** 2-4-0-F.

538. **Problems in Academic Subjects for the Hard-of-Hearing and Deaf.** 3-4-0-W. Prerequisites: SHS 433, SHS 434, and SHS 436.

539. **Pre-School Hard-of-Hearing and Deaf.** 3-4-0-F,S. Prerequisite: SHS 221 or equivalent. Practicum required.

601. **Designs in Research for Speech and Hearing.** 3-4-0-F.

602. **Current Topics in Speech Pathology.** 3-4-0-F.

611. **Diagnostic Procedures in Speech Pathology II.** 3-4-0-Su. Prerequisite: SHS 412 or equivalent.

621. **Hearing Aids.** 3-4-0-Su.

622. **Clinical Audiology I.** 3-4-0-W. Prerequisite: SHS 221 or equivalent.

623. **Clinical Audiology II.** 3-4-0-S. Prerequisite: SHS 221 or equivalent. A two-course sequence dealing with advanced audiometric techniques and clinical procedures.

624. **Infant Audiometry.** 3-4-0-W. Prerequisite: Consent of instructor. A course designed to study the behavior, test procedures, and hearing responses of newborn and young infants. Practicum required.

625. **Audiological Instrumentation.** 3-4-0-S. Prerequisite: SHS 221 or equivalent.

626. **Pathologies of the Hearing Mechanisms.** 3-4-0-W. Prerequisites: SHS 221 and SHS 402 or equivalents.

641. **Medical Diagnosis and Treatment of Speech and Hearing Pathologies.** 1-4 hrs. **Q.** Prerequisite: Consent of instructor.

692. **Special Problems.** 1-6 hrs. arr. **Q.**

696. **Practicum in Speech and Hearing Science, Audiology, Language Disorders, or Speech Pathology.** Hrs. arr.

697. **Independent Study and Research.** Hrs. arr. Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a thesis and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

698. **Thesis.** 6-0-0-**Q.**

701. **Seminar in Psychoacoustics.** 3-4-0-**X.**

702. **Seminar in Quantitative Methods in Speech and Hearing.** 3-4-0-**X.**

711. **Seminar in Aphasia and Related Disorders.** 3-4-0-**X.**

712. **Seminar in Articulation Disorders.** 3-4-0-**X.**

713. **Seminar in Cerebral Palsy.** 3-4-0-**X.**

714. **Seminar in Cleft Palate.** 3-4-0-**X.**

715. **Seminar in Clinical Counseling in Speech Pathology.** 3-4-0-**X.**

716. **Seminar in Stuttering and Related Disorders.** 3-4-0-**X.**

717. **Seminar in Voice Disorders.** 3-4-0-**X.**

718. **Seminar in Psychology of the Deaf and Speech Handicapped.** 3-4-0-**X.**

719. **Seminar in Problems and Procedures in Evaluating Children.** 3-4-0-**X.**

721. **Seminar in Aural Rehabilitation.** 3-4-0-**X.**

722. **Seminar in Differential Audiology.** 3-4-0-**X.**

723. **Seminar in Electrophysiological Audiometry.** 3-4-0-**X.**

724. **Seminar in Industrial, Military, and Community Hearing Conservation.** 3-4-0-**X.**

725. **Seminar in Non-Organic Hearing Loss.** 3-4-0-**X.**

761. **Laboratory in Speech and Hearing Sciences.** 1-3 hrs. arr. **X.**

762. **Laboratory in Audiology.** 1-3 hrs. arr. **X.**

763. **Laboratory in Speech Pathology.** 1-3 hrs. arr. **X.**

764. **Laboratory in Language Disorders.** 1-3 hrs. arr. **X.**

791. **Research in Speech and Hearing Sciences.** 1-12 hrs. arr. **Q.** Prerequisite: Approval of the major professor.

792. **Special Problems.** 3-0-0-**X.**

797. **Independent Study and Research.** Hrs. arr. **X.** Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a dissertation and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

898. **Dissertation.**

THEATRE ARTS (THE-685)

501. **History and Design of Costumes.** 3-4-0-**S.** Prerequisite: Consent of instructor. Study of historical and contemporary costume designs and their methods of construction for theatrical presentation.

512. **Stage Lighting.** 3-4-0-**F.** Prerequisite: Consent of instructor. Theory and application of general and special lighting, color, instrumentation, and control.

516. **Playwrighting.** 3-4-0-**S.** Prerequisite: Consent of instructor. Study and research in the elements of play structuring.

517. **Advanced Acting.** 3-4-0-**W.** Emphasis on presentational styles.

520. **Advanced Directing.** 3-4-0-**W.** Prerequisite: THE 320 or equivalent.

527. **Theatre History I.** 3-4-0-**F.**

528. **Theatre History II.** 3-4-0-**W.**

529. **Theatre History III.** 3-4-0-**S.**

530. **Summer Theatre I.** 3-0-0-**Su.** Prerequisite: Consent of Staff. Concentrated applied theatre.

531. **Summer Theatre II.** 3-0-0-**Su.** A continuation of THE 530.

535. **Advanced Scene Design.** 3-4-0-**S,** 1975. Prerequisite: THE 306 or consent of instructor.

545. **Advanced Stage Lighting.** 3-4-0-**S,** 1976.

558. **Modern Dance Technique and Analysis.** 2-2-2-**Q.**

559. **Musical Theatre Production.** 3-0-0-**F,S,Su.** The study of the different forms and styles of Music Theatre with special attention to the various elements of production.

565. **Music Resources for Dance.** 2-2-2-**X.** Studying and gathering of music resources for dance.

566. **Dance Lecture and Demonstration.** 3-4-0-**S,** 1976. Techniques of preparing dance lecture-demonstrations and tours.

567. **Dance Curriculum and Organization.** 3-4-0-**F.** Study of dance curriculums and administrative problems.

568. **Musical Theatre Dance.** 2-2-2-**F,W,S.**

580. **Directing Children's Theatre.** 3-0-0-**X.** Prerequisite: THE 320, THE 420, or consent of instructor. The techniques of directing, organizing, and administering a children's theatre program.

590. **Theatre Workshop. 3-0-0-Su.** Designed for the non-theatre major (i.e., English, speech, music, etc.) who is responsible for directing school or community drama activities.

601. **Introduction to Graduate Study in Theatre. 2-0-0-F.** Seminar in methods and materials of research in theatre; introduction to the bibliography of the field; organization and form of thesis.

606. **Dramatic Theory and Criticism. 3-0-0-W.** Examination and evaluation of dramatic theory from antiquity to present.

611. **Seminar: Contemporary Trends in Theatre. 3-0-0-X.**

612. **Seminar in Theatre Production. 3-0-0-X.** Theory behind newer staging techniques, such as multiple media, and research in other advances in staging.

613. **Seminar in Theatre Design and Structure. 3-0-0-X.** Research in architectural and acoustical design, lighting, seating, color, use and stage requirements.

614. **Seminar in Acting and Directing. 3-0-0-X.**

615. **Seminar in Dance, Opera, and Theatre. 3-0-0-X.**

616. **Seminar in Community and Regional Theatre. 3-0-0-X.**

691. **Research in Theatre. 1-3 hrs. arr. X.**

692. **Special Studies I. 1-3 hrs. arr. X.** Investigation into specialized areas of interest within the broad area of theatre.

692. **Special Studies II. 1-3 hrs. arr. X.**

692. **Special Studies III. 1-3 hrs. arr. X.** THE 692 may be taken three times for a total of nine hours.

696. **Practicum in Theatre I. 3-0-0-X.** Directed independent study and practical application in an area of theatre production.

696. **Practicum in Theatre II. 3-0-0-X.**

696. **Practicum in Theatre III. 3-0-0-X.** THE 696 may be taken three times for a total of nine hours.

697. **Independent Study and Research.** Hrs. arr. Not to be counted as credit toward a degree. Students who are not in residence but who are actively working on a thesis and consulting with the major professor or making use of the library or other University facilities must enroll in this course.

698. **Thesis in Theatre. 6-0-0-X.**

699. **Creative Project. 8-0-0-X.**

PART SEVEN

THE GRADUATE FACULTY

THE GRADUATE FACULTY

McCAIN, WILLIAM DAVID, President of the University. B.S., Delta State College; M.A., University of Mississippi; Ph.D., Duke University; Litt.D., Mississippi College.

ALBERS, LAWRENCE CHARLES, Assistant Professor of Communication. B.G.E., University of Omaha; M.A., University of Southern California.

ALBERTSON, LARRY MICHAEL, Assistant Professor of Physical Education. B.S., University of Houston; M.Ed, S.Ed., Ed.D., University of Georgia.

ALCORN, JOHN DOUGLAS, Chairman of Department of Counseling and Guidance and Professor of Guidance. B.S., M.Ed., Ph.D., East Texas State University.

ALLEN, JANIE ARNOLD, Assistant Professor of Curriculum and Instruction, Gulf Park. B.S., Mississippi State College for Women; M.S., Ph.D., University of Southern Mississippi.

ALONZO, FRANK OLIVER, Assistant Professor of Political Science, Natchez. LL.B., University of Alabama; M.A., doctoral study, University of Mississippi.

AMACKER, PATRICIA KAY McCONNELL, Assistant Professor of Theatre Arts and Director of Dance. B.A., Arizona State University; M.F.A., University of Utah.

ANDERSEN, PAUL DAVID, Associate Professor of Music. B.Mus., Drake University; M.Mus., Syracuse University; Ph.D., Washington University.

ANDERSON, BOBBY DEAN, Assistant Dean of the Graduate School and Professor of Educational Administration and Supervision. B.S.E., Arkansas State College; M.Ed., University of Missouri; Ed.D., University of Tennessee.

ANDERSON, HAYWARD GLENN, Associate Professor of Accounting. B.S., M.A., University of Southern Mississippi; graduate study, University of Alabama.

ANDERSON, WILLIAM HILTON, Associate Professor of English, A.B., Wofford College; M.A., Ph.D., University of South Carolina.

ANGLIN, JAY PASCAL, Associate Professor of History. B.A., Louisiana State University; Ph.D., University of California, Los Angeles.

ARDOIN, BIRTHNEY, Assistant Professor of Communication. B.A., M.A., Louisiana State University; Ph.D., Ohio University.

ATCHISON, WILLIAM DAVID, Associate Professor of Medical Technology. M.D., Medical College of Georgia.

AUSTIN, KAREN ODELL, Assistant Professor of Foreign Languages. B.A., Agnes Scott College; M.A., Middlebury College.

BABIN, WAYNE LOUIS, Professor of Physical Education. B.S., M.S., Ed.D., University of Southern Mississippi.

BAHR, HOWARD WILSON, Professor of English. A.B., Oberlin College; graduate study, Ohio State University, Oberlin College; Ph.D., University of North Carolina.

BAKER, NANCY LORENE, Associate Professor of Psychology. B.A., Texas College of Arts and Industries; C.S.W., M.S.W., Louisiana State University.

BARNES, SHELBY EUGENE, Associate Professor of Health. B.A., Southeastern Louisiana College; M.Ed., University of Mississippi; Ph.D., University of Tennessee.

BEDENBAUGH, ANGELA OWEN, Research Associate in Chemistry. B.S., University of Texas; Ph.D., University of South Carolina.

BEDENBAUGH, EDGAR HUGH, JR., Professor of Educational Administration and Supervision. B.A., M.Ed., Ed.D., University of Florida.

BEDENBAUGH, JOHN HOLCOMBE, Chairman of Department of Chemistry and Professor of Chemistry. B.S., Newberry College; M.A., University of North Carolina; Ph.D., University of Texas.

BELL, KINLOCK WADE, Assistant Professor of Physical Education. B.S., Mississippi Valley State College; M.Ed., University of Southern Mississippi.

BELL, MARSHALL LENORD, Assistant Professor of Athletic Administration and Coaching. B.S., Mississippi Valley State College; M.Ed., University of Southern Mississippi.

BELL, MICHAEL LEE, Assistant Professor of Research and Human Development. B.S., Northeastern State College of Oklahoma; M.Ed., Ed.D., University of Arkansas.

BENNER, FRANCES ELIZABETH, Associate Professor of Music. Arthur Jordan Conservatory, Butler University, Soloist Diploma in Piano; Fontainbleau School of Music; B.M., Mus.M. in Voice, Cincinnati College of Music.

BERRY, DAVID CHAPMAN, JR., Assistant Professor of English. B.S., Bob Jones University; M.S., Delta State College; Ph.D., University of Tennessee.

BISLAND, RALPH BRADFORD, JR., Assistant Professor of Computer Science and Statistics. B.S., Louisiana State University; M.B.A., Loyola University; doctoral study, Mississippi State University.

BLACK, HAROLD TYRONE, Associate Professor of Economics. B.B.A., M.A., Texas Technological College; Ph.D., Tulane University.

BLOMQUIST, GARY JAMES, Assistant Professor of Chemistry. B.S., Wisconsin State University, La Crosse; Ph.D., Montana State University.

BONNER, LILLY ANNELLE, Chairman of Department of Business Education and Professor of Business Education. B.S., M.A., University of Southern Mississippi; Ed.D., Indiana University.

BOROUGHS, HERMAN, Coordinator of Graduate Studies in Education and Psychology and Professor of Counseling and Guidance. B.S., Texas College of Arts and Industries; M.Ed., Ed.D., University of Missouri.

BORTHWICK, MIRIAM TECCO, Assistant Professor of Business Education. B.S., Ohio University; M.Ed., Kent State University; doctoral study, Kent State University.

BORTHWICK, PAUL BERTRAM, JR., Assistant Professor of Curriculum and Instruction. B.S., M.S., Kent State University; doctoral study, University of Akron.

BOURGEOIS, LAWRENCE LOUIS, Professor of Sociology. A.B., Loyola University; M.A., Louisiana State University; Ph.D., Harvard University.

BOUTWELL, COLEN JESSE, JR., Associate Professor of Industrial and Vocational Education. B.S., M.S., University of Southern Mississippi; Ed.D., University of Missouri.

BOWEN, RICHARD LEE, Professor of Geology. A.B., University of North Carolina; M.A., Indiana University; Ph.D., University of Melbourne; Fulbright Scholar to Australia.

BOWERS, RICHARD HUGH, Associate Professor of History. B.A., M.A., Ph.D., Mississippi State University.

BOYD, WILLIAM DOUGLAS, JR., Assistant Professor of Library Science. B.A., Southwestern at Memphis; B.D., Union Tehological Seminary; Th.M., Princeton Theological Seminary.

BOYTE, CARLOS LARON, Part-time Instructor of Industrial and Vocational Education. B.S., M.S., University of Southern Mississippi.

[1] BRACEY, HYLER JEFFERY, Associate Professor of Management. B.B.A., Lamar State College of Technology; M.B.A., Ph.D., Louisiana State University.

BRANDT, LOUIS KOHL, Professor of Finance and General Business. B.E., Wisconsin State College, Whitewater; M.A., Ph.D., University of Wisconsin.

BRAUN, JULIUS CHRISTIAN, Professor of Educational Administration and Supervision. B.S., Buffalo State Teachers College; Ed.M., University of Buffalo; Ed.D., Columbia University.

BRENT, CHARLES RAY, Director of Institute of Environmental Science and Professor of Chemistry. B.A., University of Southern Mississippi; M.S., Ph.D., Tulane University.

BRENT, ROBERT ARTHUR, Professor of History. A.B., Gettysburg College; M.A., Ph.D., University of Virginia.

BRINEGAR, BONNIE CARTER, Instructor of English. B.A., M.A., University of Mississippi.

BROWN, BAHNGRELL WALTER, Professor of Geology. B.A., University of Omaha; M.S., Ph.D., University of Nebraska.

BROWN, FRED WALDO, Professor of Science Education. B.S., Georgia Southern College; M.A., University of Alabama; Ed.D., University of Georgia.

BROWN, IVA DINKINS, Associate Professor of Science Education. B.S., Georgia Southern College; M.Ed., Ed.D., University of Georgia.

BROWN, MARIANNE, Assistant Professor of Health. B.S., Delta State College; M.A., University of Southern Mississippi; graduate study, University of Alabama.

BROWN, MARICE COLLINS, Chairman of Department of English and Professor of English. A.B., Mississippi State College for Women; M.A., University of Southern Mississippi; Ph.D., Louisiana State University.

BROWN, NANCY WORTHINGTON, Assistant Professor of Special Education. B.A., University of Miami; M.A., East Carolina University; Ed.D., University of Northern Colorado.

BRUNDAGE, WILLIAM GREGORY, Assistant to the Dean, College of Science and Technology, Chairman of Department of Medical Technology, and Associate Professor of Medical Technology. B.S., M.S., Northwestern State College; Ph.D., Louisiana State University.

BUCKLEY, BARBARA GAIL LEE, Assistant Professor of Foreign Languages. B.A., M.A., Ph.D., Florida State University.

BUFKIN, BILLY GEORGE, Assistant Professor of Polymer Science. B.S., Ph.D., University of Southern Mississippi.

BURCH, JOHN CECIL, Academic Coordinator and Associate Professor of Counseling and Guidance, Gulf Park. B.A., University of Minnesota; M.Ed., Ed.D., University of Southern Mississippi.

BURGE, CECIL DWIGHT, Assistant Professor of Computer Science and Statistics. B.S., M.S., Ph.D., Mississippi State University.

BURGESS, CHARLES DUANE, JR., Part-time Associate Professor of Psychology. B.S., Mississippi College; M.D., University of Mississippi Medical School.

BURRUS, JOHN NEWELL, Distinguished University Professor of Sociology. A.B., University of Mississippi; M.A., Ph.D., Louisiana State University.

BURTON, McKAY C., Lecturer in Speech and Hearing Sciences. B.S., M.Sc., Brigham Young University; Ph.D., Ohio State.

BUSBEE, RAYMOND LEROY, Chairman of Department of Recreation and Professor of Recreation. B.S., M.S., Ph.D., University of Georgia.

CAMERON, OTTAMISE COLLEEN WHITTINGTON, Associate Professor of Economics. B.S., M.S., University of Southern Mississippi; D.B.A., Indiana University.

CAMPBELL, CLAUDE LOUIS, Associate Professor of Curriculum and Instruction. B.S., University of Southern Mississippi; M.A., Ed.D., George Peabody College.

CARLSON, CARL GILBERT, Assistant Professor of Psychology. B.A., M.A., California State College; Ph.D., University of Hawaii.

CARLSON, KENNETH LEE, Assistant Professor of Health. B.S., M.S., Central Missouri State College.

CARNOVALE, AUGUST NORBERT, Assistant Professor of Music Education. B.M., Louisiana State University; M.A., Columbia University; D.Mus.A., University of Iowa.

CARPENTER, STANLEY MALCOLM, Associate Professor of Accounting. B.S., University of Southern Mississippi; M.B.A., doctoral study, University of Georgia.

CARR, WILBUR LLOYD, Chairman of Department of Health and Professor of Health. B.A., M.A., Ph.D., University of North Carolina.

CARSON, JOSEPH O'HARA, JR., Professor of Educational Administration and Supervision. B.A., M.A., Tulane University; Ph.D., Florida State University.

CARTER, DANNY REED, Acting Chairman of Department of Computer Science and Statistics and Associate Professor of Computer Science and Statistics. B.S., M.S., University of Southern Mississippi; doctoral study, Virginia Polytechnic Institute.

CAUDILL, ORLEY BRANDT, Professor of Political Science. B.S., M.A., Ph.D., University of Maryland.

CAVENY, DAVID JAMES, Chairman of Department of Mathematics and Associate Professor of Mathematics. B.S., Western Carolina College; M.A., Ph.D., University of Kentucky.

CAZEDESSUS, DUCHEIN, Associate Professor of Music. B.M., Louisiana State University; M.M., Manhattan School of Music; Ed.D., Teachers College, Columbia University.

CHICHESTER, ELSIE BOSCHERT, Assistant Professor of Family Life Services. B.S., Delta State Teachers College; M.S., University of Tennessee.

CICCARELLI, ORAZIO ANDREA, Assistant Professor of History. B.A., Francis College; M.A., Ph.D., University of Florida.

CLEMENTS, JOSEPH HARDIN, Professor of Finance. A.B., University of Kentucky; M.B.A., University of Mississippi; Ed.D., University of Oklahoma.

CLIBURN, JOSEPH WILLIAM, Professor of Biology. B.S., Millsaps College; M.A., University of Southern Mississippi; Ph.D., University of Alabama.

CLINCH, ROBERT WALTER, Assistant Professor of Social Work and Director of Research and Instructional Development, School of Social Work. Dip.Elec.Eng., Caulfield Institute of Technology (Australia); Ph.D., Center for Instructional Communications, Syracuse University.

CONKLIN, ROBERT DALE, Assistant Professor of History. B.S., Purdue University; M.A., Ph.D., Kent State University.

COOKE, ROBERT SAMUEL, JR., Associate Professor of Medical Technology. B.S., M.D., University of Arkansas.

COOLEY, WILLIE EARL, Assistant Professor of Research and Human Development. B.S., M.Ed., Ed.D., University of Southern Mississippi.

COOPER, WALTER ELMORE, JR., Assistant to Dean of Education and Psychology and Associate Professor of Research and Human Development. B.S., Huntingdon College; M.A., Ed.D., University of Alabama.

CRACRAFT, JOSEPH DAVID, Assistant Professor of Physical Education. B.A., M.A., California State University, Sacramento; Ph.D., University of Utah.

CRAVEN, BOBBY EUGENE, Associate Professor of Science Education. B.S., Mississippi College; M.Ed., Ed.D., University of Mississippi.

CREWS, ROBERT THORNTON, Education Coordinator and Assistant Professor of Medical Technology. B.S., M.S., Auburn University; M.T. (ASCP), Baylor University Hospital.

CROOK, GEORGE TRUETT, JR., Assistant Professor of Theatre Arts. B.A., M.A., University of California, Davis.

CROSS, RALPH DONALD, Associate Professor of Geography. A.B., Eastern Michigan; M.A., University of Oklahoma; Ph.D., Michigan State University.

CULBERSON, JAMES OLIN, Associate Professor of Counseling and Guidance. B.S., Bob Jones University; M.A., Columbia Bible College; M.Ed., University of South Carolina; Ed.D., University of Georgia.

CUMMINGS, ROBERT RAY, Assistant Professor of Accounting. B.B.A., M.B.A., Memphis State University; doctoral study, University of Mississippi.

CUNNINGHAM, DAVID FRANKLIN, Professor of Curriculum and Instruction. B.S.E., Arkansas State Teachers College; M.A., George Peabody College; Ed.D., University of Houston.

CUPP, EDDIE WAYNE, Assistant Professor of Biology. B.A., Murray State College; Ph.D., University of Illinois.

DALE, JOHN HARBERT, Assistant Professor of Science Education. B.S., Mississippi State University; M.S., University of Southern Mississippi.

DANIELS, DONNIE LADD, Assistant Professor of Economics and Research Associate, Bureau of Business Research. B.S., Mississippi College; M.S., Mississippi State University; Ph.D., University of Illinois.

DANIELS, JACK LEMORE, Professor of Counseling and Guidance. B.S., University of Texas; M.Ed., Stephen F. Austin State College; Ph.D., East Texas State University.

DAVIDSON, CHARLES WINFREY, Assistant Professor of Research and Human Development. B.S., Louisiana Polytechnic University; M.Ed., Ed.D., University of Arkansas.

DAVIS, BONNIE JEAN, Professor of Curriculum and Instruction. B.S., M.S., Ph.D., University of Southern Mississippi.

DAVIS, JAMES LOUIS, Associate Professor of Management. B.S., M.S., University of Southern Mississippi; doctoral study, Louisiana State University.

DAVIS, JAMES THERON, JR., Assistant Professor of Art Education. B.F.A., M.A.E., University of Southern Mississippi.

DAVIS, JAMES TREADWELL, Professor of History. B.S., Memphis State University; M.A., Ph.D., Vanderbilt University.

DAVIS, JOHN CHESTER, III, Assistant Professor of Curriculum and Instruction. B.S., M.Ed., Ed.D., East Texas State University.

DAWSON, CHARLES E., Assistant Professor of Biology, Gulf Coast Research Laboratory. B.S., University of Miami.

DAWSON, MYRTLE H., Lecturer in Speech and Hearing Sciences. B.A., M.Ed., University of Michigan; Ed.D., University of Washington.

DAY, LARRY H., Lecturer in Speech and Hearing Sciences. M.D., University of Mississippi Medical School.

DEAR, JAMES ESTUS, Professor of Accounting. B.S., Northeast Louisiana State College; M.B.A., Ph.D., Louisiana State University.

DENNIS, CHARLES N., Assistant Professor of Finance. B.A., Southern Methodist University; M.A., Memphis State University; Ph.D., University of Arkansas.

DENNIS, PERRY BROOKS, Assistant Professor of Music Education and Assistant Professor of Research and Human Development. B.S., Mississippi State University; B.Mus.Ed., Vandercook School of Music; M.Mus.Ed., University of Michigan; Ed.D., University of Southern Mississippi.

DICKSON, ANDREW LINK, Assistant Professor of Psychology. B.A., University of South Carolina; M.A., University of Tennessee; Ph.D., University of Oklahoma.

DOBLIN, STEPHEN ALAN, Assistant Professor of Mathematics. B.S., M.A., Ph.D., University of Alabama.

DONOHUE, JOHN ROBERT, Associate Professor of Music. B.M., M.M., Louisiana State University; Ph.D., Michigan State University.

DONOVAN, JACK POLLARD, Associate Professor of Music Education and Coordinator of Graduate Studies. B.S., M.Mus., University of Nebraska; Ph.D., University of Southern Mississippi.

DORE, DONALD EDWARD, JR., Associate Professor of Medical Technology. B.S., M.D., Louisiana State University.

DOUMAS, CHRISTOS LEONIDAS, Professor of Political Science. B.A., M.A., Ph.D., University of California, Los Angeles.

DUBARD, NETTIE ETOILE, Associate Professor of Speech and Hearing Sciences. B.S., Mary Hardin-Baylor University; M.A., George Peabody College; graduate study, University of Texas, University of Utah, Central Institute of the Deaf at Washington University; Ph.D., University of Southern Mississippi.

DUNAWAY, ROBERT WINSTON, Assistant Professor of Athletic Administration and Coaching. B.S., Mississippi College; M.Ed., University of Southern Mississippi; doctoral study, University of Indiana.

DUNIGAN, NANCY CASEY, Assistant Professor of Mathematics. A.B., Greensboro College; M.M., University of Tennessee; doctoral study, Northwestern University.

DURKEE, PETER EASTON, Dean of Students and Associate Professor of Counseling and Guidance. A.B., M.A., Colgate University; Ph.D., University of Southern Mississippi.

EASTERLING, HENRY BENJAMIN, Professor of Research and Human Development. B.S., University of Southern Mississippi; M.A., University of Alabama; Ed.D., Duke University.

EDWARDS, WARRICK RIDGELY, III, Assistant Professor of History. B.S., M.A., Ph.D., Louisiana State University.

ELLENDER, RUDOLPH DENNIS, JR., Assistant Professor of Microbiology. B.S., M.S., Louisiana State University; Ph.D., Texas A & M University.

ESTES, THOMAS GLENVALL, JR., Associate Professor of Accounting. B.S., University of Southern Mississippi; M.S., Oklahoma State University; Ph.D., University of Arkansas.

ETZOLD, DAVID JULIUS, Professor of Management and Senior Research Associate. B.S., Mississippi State University; M.B.A., Rollins College; D.B.A., Mississippi State University.

EVERETT, MICHAEL DAVID, Associate Professor of Economics. B.A., Ph.D., Washington University.

FAULKINBERRY, MARY EVELYN McCOMIC, Chairman of Department of Home Economics Education and Professor of Home Economics Education. B.S., Texas Woman's University; M.S., Colorado State University; Ph.D., Texas Woman's University.

FERGUSON, WILLIAM FRANKLIN, Assistant Professor of Research and Human Development. B.S., M.Ed., Mississippi State University; Ed.D., University of Mississippi.

FIKE, CLAUDE EDWIN, Dean of the College of Liberal Arts and Professor of History. A.B., Duke University; A.M., Columbia University; Ph.D., University of Illinois.

FIKE, HELEN DUKE, Instructor of Social Work. B.A., University of Mississippi; M.S.W., Tulane University.

FISH, ARTHUR GEOFFREY, Associate Professor of Biology. B.S., Carleton University; M.S., McGill University; Ph.D., University of British Columbia.

FITCH, JAMES LEE, Assistant Professor of Speech and Hearing Sciences. B.S., Illinois State Normal University; M.S., Ph.D., Florida State University.

FLETCHER, TYLER HERRICK, Assistant Professor of Political Science. B.A., University of Texas; M.S., Michigan State University.

FLOWERS, JOHN MORGAN, JR., Associate Professor of Science Education. A.B., M.S., University of Alabama; M.Ed., Ed.D., Duke University.

FOLSE, RAYMOND FRANCIS, JR., Associate Professor of Physics. B.S., Loyola University; Ph.D., Louisiana State University.

FOLTZ, DAVID BARON, Chairman of Department of Music and Professor of Music. B.M., M.M., Illinois Wesleyan University; Mus.D., Texas Wesleyan College.

FONTECCHIO, GIOVANNI, Assistant Professor of Foreign Languages. B.S., Northern Michigan University; M.A., doctoral study, Louisiana State University.

FRAYER, PAUL DAVID, Assistant Professor of Polymer Science. B.S., Indiana State University; M.S., Case Institute of Technology; Ph.D., Case Western Reserve University.

FREEMAN, JEAN TODD, Instructor of English. A.B., Mount Holyoke College.

FRUGE, NICHOLAS HUGH, Associate Professor of Research and Human Development. B.A., M.Ed., Ed.D., McNeese State University.

FULLER, GENE BOB, Assistant Professor of Biology. B.S., Sam Houston State College; M.S., Oklahoma State University; Ph.D., Purdue University.

GATES, LARRY JAMES, Assistant Professor of Psychology. B.A., Eastern Illinois University; M.Ed., University of Illinois.

GEORGE, ALBERT DONALD, Professor of Communication. A.B., M.A., Ph.D., Louisiana State University.

GIBBS, SARAH LITTLETON WEAVER, Dean of School of Home Economics and Professor of Food and Nutrition. B.S., M.A., University of Southern Mississippi; Ph.D., Florida State University.

GINN, CLYDE NEULAN, Assistant Professor of Research and Human Development. B.S., M.Ed., University of Southern Mississippi; Ed.D., McNeese State University.

GLADDEN, JAMES WYMAN, JR., Assistant Professor of Geography. B.A., M.S., University of Alabama.

GLICK, LESTER JAY, Dean of School of Social Work and Professor of Social Work. B.A., Goshen College; M.S.W., Ohio State University; D.S.W., Washington University.

GOLDSMITH, WILLIAM ALEE, Assistant Professor of Geology. B.S., M.S., Mississippi State University; Ph.D., University of Florida.

GONZALES, JOHN EDMOND, The William D. McCain Distinguished University Professor of History. B.S., M.A., Louisiana State University; Ph.D., University of North Carolina.

GORE, BILL WES, Dean and Associate Professor of Educational Research, Natchez. B.S., Mississippi College; M.S., University of Mississippi; Ph.D., University of Southern Mississippi.

GOTTLEBER, HENRY ARTHUR, Professor of Management. B.S., University of Southern Mississippi; M.B.A., Boston University; Ph.D., University of Arkansas.

GOWER, ALBERT EDWARD, JR., Associate Professor of Music and Coordinator of Undergraduate Studies. A.B., Sacramento State College; M.M., University of Oregon; Ph.D., North Texas State University.

GOWER, WILLIAM TURNER, Chairman of Department of Music Education and Professor of Music Education. B.Mus., M.Mus., University of Denver; M.F.A., Ph.D., University of Iowa.

GRANTHAM, BILLY JOE, Chairman of Department of Biology and Associate Professor of Biology. B.S., M.S., Ph.D., University of Southern Mississippi.

GREENE, JOSEPH ARTHUR, JR, Dean of the School of Business Administration and Professor of Economics. B.A., Berea College; M.A., Ph.D., University of Virginia.

GUICE, JOHN DAVID WYNNE, Associate Professor of History. B.A., Yale University; M.A., University of Texas; Ph.D., University of Colorado.

GUNN, ERIC McCOY, Dean of College of Education and Psychology and Professor of Research and Human Development. B.S., M.A., University of Southern Mississippi; Ed.D., George Peabody College.

GUNTER, GORDON, Director Emeritus, Gulf Coast Research Laboratory and Professor of Biology. A.B., Northwestern State College of Louisiana; M.A., Ph.D., University of Texas.

GUTSCH, KENNETH URIAL, Professor of Counseling and Guidance. B.M., University of Miami; M.Ed., University of Mississippi; Ed.D., Florida State University.

GWIN, STANFORD PAYNE, Chairman of Department of Communication and Associate Professor of Communication. B.S., M.S., University of Southern Mississippi; Ph.D., University of Florida.

HALES, GRAHAM LEE, JR., Chaplain and Coordinator of Religious Activities and Assistant Professor of Anthropology, Philosophy, and Religion. B.A., Millsaps College; B.D., Th.D., Southern Baptist Seminary.

HALEY, ARTHUR JOSEPH, Assistant Professor of Recreation. A.B., Stonehill College; M.Ed., Springfield College; doctoral study, Texas A & M University.

HALL, JAMES LARRY, Assistant Professor of Communication. B.A., Louisiana College; M.A., Louisiana State University; Ph.D., Ohio University.

HAMMAN, ALTRA HOWSE GILL, Chairman of Department of Family Life Services and Professor of Family Life Services. B.S., University of Southern Mississippi; M.S., University of Tennessee; Ph.D., Texas Woman's College.

HAMPTON, KENNETH GERALD, Associate Professor of Chemistry. B.S., Wake Forest University; Ph.D., Duke University.

HAMWI, ISKANDAR SALOUM, Assistant Professor of Fianance. B.A., Damascus University; M.A.S., University of Michigan; M.A., Ph.D., University of Pennsylvania.

HAND, JAMES DAVID, Assistant Professor of Research and Human Development. B.S., State University of New York, Cortland; M.S., University of Bridgeport.

HARPER, GLENN TERRY, Associate Professor of History. B.A., Furman University; M.A., Ph.D., Duke University.

HARTWIG, GILBERT FREDERICK, Professor of Theatre Arts. Ph.B., M.A., Marquette University; Ph.D., University of Wisconsin.

HATCHER, WILLIAM HAMILTON, Chairman of Department of Political Science, Director of George Robert Olliphant University Honors Center, and Professor of Political Science. B.A., M.A., University of Arkansas; Ph.D., Duke University.

HAWKINS, WILLIAM E., Assistant Professor (Assistant Electron Microscopist, Gulf Coast Research Laboratory). B.S., Mississippi State University; M.S., Ph.D., University of Mississippi Medical Center.

HAWKRIDGE, FRED MARTIN, JR., Assistant Professor of Chemistry. B.S., University of Georgia; Ph.D., University of Kentucky.

HAYNIE, JERRY THOMAS, Assistant Professor of Music Education and Assistant Director of Music Camps. B.M., Union University; M.M., Ph.D., George Peabody College for Teachers.

HAYS, PATRICIA RUTH McCOY, Assistant Professor of Music. B.M.Ed., M.A., University of Southern Mississippi; doctoral study, University of Oregon.

HERZOG, RICHARD FRANZ, Professor of Physics. Ph.D., University of Vienna.

HILDMAN, LEE KEMERLY, Assistant Professor of Psychology. B.S., M.S., Florida State University; doctoral study, University of Florida.

HILL, ROBERT BYRON, Assistant Professor of Theatre Arts. B.A., Catawba College; M.F.A., Southern Methodist University.

HILL, ROGER HARVEY, Assistant Professor of Music. B.M., M,M., Indiana University.

HILL, VIRGINIA SWANN, Assistant Professor of Management. B.S., M.B.A., University of Southern Mississippi; Ph.D., Louisiana State University.

HINTON, HUGH FRANK, Assistant Professor of Political Science. B.A., M.A., Ph.D., University of Texas.

HOLLOWAY, JOE EARL, Dean and Associate Professor of Educational Administration, Gulf Park. B.S., M.Ed., Ed.D., University of Southern Mississippi.

HORN, PAUL EDWARD, Associate Professor of Psychology. B.A., M.A., Ph.D., University of Mississippi.

HOWARD, PATRICIA NELL, Assistant Professor of Biology. B.S., Central Oklahoma State University; Ph.D., University of Texas.

HOWARD, ROSALYN FREEMAN, Assistant Professor of Art Education. B.S., Troy State University; M.S., Florida State University.

HOWELL, JOHN EMORY, Associate Professor of Chemistry. B.S.Ed., Marion College; M.N.S., Arizona State University; Ph.D., University of Iowa.

HOWSE, HAROLD D., Director of the Gulf Coast Research Laboratory and Professor of Biology. B.S., M.S., University of Southern Mississippi; Ph.D., Tulane University.

HUGHES, WILLIAM EUGENE, Chairman of Department of Physics and Astronomy and Professor of Physics and Astronomy. B.S., University of Southern Mississippi; Ph.D., University of Alabama.

HUNTER, ELVIN MAX, Chairman of Department of Industrial and Vocational Education and Professor of Industrial and Vocational Education. BS., M.Ed., Ed.D., University of Missouri.

IMBRAGULIO, GEORGE EUGENE, Assistant Professor of Music. B.M., M.M., Michigan State University; summer study: Aspen, Colorado; St. Cecelia Conservatory, Rome, Italy; Florida State University; Michigan State University.

IRBY, BOBBY NEWELL, Chairman of Department of Science Education and Associate Professor of Science Education. B.A., University of Washington; M.S., Ed.D., University of Mississippi.

JACKSON, HOWARD OLIVER, Assistant Dean of School of Business Administration and Associate Professor of Accounting. B.S., M.A., University of Southern Mississippi; graduate study, University of Alabama.

JAMES, MARY ELLEN LINGO, Assistant Professor of Curriculum and Instruction. B.S.E., M.S.E., State College of Arkansas; Ed.D., University of Arkansas.

JEROME, RAOUL FRANK HOWARD, Assistant Professor of Music Education. B.M., M.M., North Texas State University.

JETER, MELVYN WILLIAM, Assistant Professor of Mathematics, B.S., Midwestern University; M.S., North Texas State University; Ph.D., Oklahoma State University.

JOHNSON, MARION CLOWER, Chairman of Department of Athletic Administration and Coaching and Associate Professor of Athletic Administration and Coaching. B.S., University of Southern Mississippi; M.S., Louisiana State University; doctoral study, Indiana University.

JOHNSON, ROGER BARTON, JR., Chairman of Department of Foreign Languages and Professor of Foreign Languages. B.A., University of Southern Mississippi; A.M., Ph.D., University of Illinois.

JOHNSTON, LEROY, Assistant Professor of Music Education. B.A., Kansas State Teachers College; M.S., Juilliard School of Music; doctoral study, University of Southern California.

JONES, LEE WAYNE, Associate Professor of Research and Human Development and Director of Media Services Center and Audiovisual Aids. B.M., M.Ed., Stephen F. Austin University; Ed.D., East Texas State University.

JONES, PERCY COLEMAN, Instructor of Recreation. B.S., M.S., University of Southern Mississippi.

JONES, WILLIAM EDWARD, JR., Assistant Professor of Library Science. B.S., Jackson State; M.S., Atlanta University; doctoral study, University of Pittsburgh.

JORDAN, BRYCE DONNELL, Associate Professor of Finance. B.S., Mississippi State University; M.P.A., Harvard University; doctoral study, University of Alabama.

KALISCH, PHILIP ARTHUR, Assistant Professor of Curriculum and Instruction and Assistant Professor of History. B.S., M.A., University of Nebraska; Ed.D., Pennsylvania State University.

KARNES, FRANCES ANN, Assistant Professor of Research and Human Development. B.S., Quincy College (Illinois); Ed.M., Ph.D., University of Illinois.

KARNES, MORRIS RAY, Professor of Educational Administration and Supervision. B.S., M.S., North Texas State University; Ph.D., University of Missouri.

KAY, WALLACE GRANT, Curriculum Director of George Robert Olliphant University Honors Center and Associate Professor of English. B.A., Southern Methodist University; M.A., Ph.D., Emory University.

KAZELSKIS, RICHARD, Director of Bureau of Research and Educational Programs and Associate Professor of Research and Human Development. B.S., Ed.D., University of Georgia.

KECK, WILLIAM THOMAS, Assistant Professor of Music Education. B.M., Eastman School of Music; M.M., Vandercook College of Music.

4 KEITH, NATHAN READ, JR., Research Associate, Bureau of Institutional Research and Assistant Professor of Research and Human Development. B.S., M.S., Ed.D., University of Georgia.

KELLEY, ARTHELL, Professor of Geography. B.S., University of Southern Mississippi; M.A., University of Missouri; Ph.D., University of Nebraska.

KELLY, BRIAN JOSEPH, Assistant Professor of Counseling and Guidance. B.A., University of Northern Colorado; M.Ed., University of Missouri; Ed.D., North Texas State University.

KENAMOND, FREDERICK DILL, Professor of Accounting. A.B., Shepherd College; M.S., University of Southern Mississippi; Ph.D., University of Alabama.

KING, ROBERT WILLIAM, Associate Professor of Mathematics. B.S., M.A., University of Southern Mississippi; M.S., Ph.D., Florida State University.

KING, ROGER TERRY, Associate Professor of Finance. B.B.A., University of Mississippi; M.B.A., D.B.A., Texas Technological College.

KNIGHT, HAROLD VICTOR, Associate Professor of Research and Human Development. B.S., Livingston State College; M.S.Ed., Northwestern State College of Louisiana; Ed.D., University of Southern Mississippi.

KOEPPEL, JOHN CARRINGTON, Associate Professor of Psychology. B.S., M.A., Memphis State University; Ph.D., Oklahoma State University.

KRUBSACK, ARNOLD JOSEPH, Assistant Professor of Chemistry. B.A., St. Olaf College; Ph.D., Stanford University.

KRUSE, THOMAS L., Assistant Professor of Social Work. B.A., University of Kansas; M.S.W., Washington University; Ph.D., Ohio State University.

KUTTNER, ROBERT E., Associate Professor of Anthropology, Philosophy, and Religion. B.S., City College of New York; Ph.D., University of Connecticut.

LADNER, JAMES LARRY, Assistant Professor of Athletic Administration and Coaching. B.S., Louisiana College; M.Ed., University of Southern Mississippi; doctoral study, Indiana University.

LANDRY, DAVID MICHAEL, Assistant Professor of Political Science. B.A., Tulane University; M.A., American University; Ph.D., University of Notre Dame.

LANGDON, JAMES GILBERT, Assistant Professor of Guidance. B.S., Southern State College; M.S., Ed.D., University of Southern Mississippi.

LANMON, MARVIN LEE, JR., Assistant Professor of Industrial and Vocational Education. B.S., M.Ed., Ed.D., East Texas State College.

LARSEN, JAMES BOUTON, Assistant Professor of Microbiology. B.A., Kalamazoo College; M.S., Ph.D., University of Miami.

LARSON, JAMES WILLIAM, JR., Chairman of Department of Physical Education and Professor of Physical Education. B.S., M.S., Ed.D., University of Southern Mississippi.

LASATER, ALICE ELIZABETH, Assistant Professor of English. B.A., University of Chattanooga; M.A., Ph.D., University of Tennessee.

LEBSACK, SHARON ELAINE, Assistant Professor of Music Education. B.A., B.M., M.A., Colorado State College.

LEE, BILLY EUGENE, Assistant Professor of Research and Human Development and Counselor, KAFB. B.S., M.Ed., Mississippi State University; Ed.D., University of Mississippi.

LEE, TERRY MILTON, Assistant Professor of Recreation. B.S., Henderson State College; M.S., University of Arkansas; doctoral study, University of Georgia.

LEONARD, REX LEE, Associate Professor of Research and Human Development. B.S., United States Naval Academy; M.S., Texas A & I University; Ph.D., University of Northern Colorado.

LEWIS, CAROLYN McKEE, Assistant Professor of Business Education. B.S., M.S., University of Southern Mississippi; Ed.D., University of Houston.

LI, CHEN-TUAN, Associate Professor of Economics. B.A., National Chingchi University; M.A., Ph.D., University of Florida.

LOK, WALTER JAMES, Chairman of Department of Allied Arts and Professor of Art. B.Des., M.Des., University of Michigan; Ph.D., University of Alabama.

LONG, LORA ALCORN, Assistant Professor of Library Science. B.A., M.S., Kansas State Teachers College; M.L.S., Rutgers University; Ed.D., University of Mississippi.

LOWE, JAMES DOUGLAS, JR., Professor of Psychology. B.S., M.A., Ph.D., University of Alabama.

McCAIN, DOUGLAS CLAYTON, Assistant Professor of Chemistry. B.S., Purdue University; Ph.D., University of California, Berkeley.

McCARTHY, MARY MARGARET, Chairman of Department of Food and Nutrition and Professor of Food and Nutrition. B.S., M.A., University of Southern Mississippi; Ph.D., Louisiana State University.

McCARTNEY, JESSE FRANKLIN, Associate Professor of English. B.S., Oklahoma State University; M.A., Ph.D., University of Arkansas.

McCARTY, KENNETH GRAHAM, JR., Associate Professor of History. B.S., M.A., University of Southern Mississippi; Ph.D., Duke University.

McCARVER, CLARENCE EDWARD, Professor of Health. A.B., Howard Payne College; B.S., M.A., George Washington University; Ed.D., University of Texas.

McCRAW, HARRY WELLS, Assistant Professor of English. B.S., Massachusetts Institute of Technology; M.A., Ph.D., Tulane University.

McDANIEL, MAX HAROLD, Associate Professor of Psychology. B.A., Millsaps College; M.A., University of Mississippi; Ph.D., Purdue University.

McKEE, JESSE OSCAR, Associate Professor of Geography. B.S., in Ed., Clarion State College; M.A., Ph.D., Michigan State University.

McMILLEN, NEIL RAYMOND, Associate Professor of History. B.A., M.A., University of Southern Mississippi; Ph.D., Vanderbilt University.

McNINCH, GEORGE HAAS, Director of Developmental Reading Center and Associate Professor of Curriculum and Instruction. B.S., University of Southern Mississippi; M.Ed., University of Mississippi; Ed.D., University of Georgia.

McPHAIL, JAMES HAROLD, Chairman of Department of Educational Administration and Supervision and Professor of Educational Administration. B.S., M.Ed., University of Southern Mississippi; Ed.D., Boston University.

McQUISTON, JAMES MERWYN, JR., Assistant Professor of Economics. B.S., University of Southern Mississippi; doctoral study, University of Virginia.

McRAVEN, PATRICIA ANNE, Instructor of English. B.A., Little Rock University; M.A., University of Arkansas; doctoral study, University of Iowa.

MADSEN, THEODORE WALTER, Assistant Professor of Music Education. B.A., Colorado State College; M.A., University of Iowa.

MANLY, THERON W., Assistant Professor of Curriculum and Instruction, USM Gulf Park. B.S., Howard College; M.A., Ed.D., University of Alabama.

MANNONI, RAYMOND, Dean of School of Fine Arts and Professor of Music. B.S., Kansas State College; B.M., University of Michigan; M.M.Ed., Northwestern University; Mus.Ed.D., Chicago Musical College.

MARKWALDER, WINSTON ERNEST, Assistant Professor of Special Education. B.A., Drake University; Ph.D., University of Minnesota.

MARQUARDT, RONALD GENE, Assistant Professor of Political Science. B.S., M.S., Kansas State College; Ph.D., University of Missouri.

MARSHALL, MARY HEWITT, Instructor of Speech and Hearing Sciences. B.A., Columbia College (South Carolina); M.Ed., University of South Carolina.

MARTIN, BILLY JOE, Assistant Professor of Biology. B.S., M.S., University of Southern Mississippi; Ph.D., Rice University.

MARTIN, THOMAS STANLEY, Director of Student Health Services and Assistant Professor of Athletic Administration and Coaching. B.S., Mississippi College; M.Ed., University of Southern Mississippi; M.D., University of Mississippi.

MASON, ROBERT FINLAY, Assistant Professor of Music Education. D.R.S.A.M., Royal Scottish Academy of Music; M.M., University of Southern Mississippi.

MATTHEWS, JACK GIBSON, Assistant Professor of Science Education. B.S.E., Henderson State College; M.S., University of Arkansas; Ph.D., Ohio State University.

[2] MATTOX, BRUCE W., Director of Mississippi-Alabama Sea Grant Consortium. B.S. in B.A., University of Tennessee; Ph.D., Oregon State University.

MEADE, JAMES WALTER, JR., Assistant Professor of Art. B.S., M.A., East Tennessee State University; M.F.A., University of Georgia.

MEALOR, WILLIAM THEODORE, JR., Assistant Professor of Geography. B.A., University of Florida; M.A., Ph.D., University of Georgia.

MEHEARG, LILLIEN ERL, Professor of Psychology. B.A., Millsaps College; M.A., Louisiana State University; Ph.D., University of Southern Mississippi.

MESROBIAN, ROBERT, Assistant Professor of Theatre Arts and Director of Opera Theatre. B.F.A., M.F.A., Boston University College of Music.

MILAM, JESSE LLOYD, Professor of Physical Education. B.A., Louisiana Polytechnic Institute; M.A., Ed.D., Columbia University.

MILKENT, MARLENE MARIE, Assistant Professor of Science Education. B.S., California State College; Ph.D., University of Texas.

MILLER, LEO REYNOLDS, Professor of Curriculum and Instruction. B.S.Ed., Kansas City, Missouri, Teachers College; M.S.Ed., University of Kansas; Ed.D., Pennsylvania State University.

MILLER, WALLACE DYETT, Associate Professor of Curriculum and Instruction. A.B., Southwest Missouri State College; M.A., Northeast Missouri State College; Ph.D., Southern Illinois University.

MILNER, LOUELLA GILL, Associate Professor of Home Economics Education. B.S., M.S., Ed.D., University of Southern Mississippi.

MOFFAT, GENE HERBERT, Assistant Professor of Psychology. B.S., Allegheny College; A.M., Northern Illinois University; Ph.D., University of South Dakota.

MOORE, BOBBY DEAN, Assistant Professor of Research and Human Development. B.S., Lamar State College of Technology; M.Ed., North Texas State University; Ed.D., Southwestern State College (Oklahoma).

MOORE, JOHN PAUL, JR., Assistant Professor of Industrial and Vocational Education. B.S., Arkansas State Teachers College; M.S., East Texas State University; Ed.D., Texas A & M University.

MOORE, ROY NEWTON, Associate Professor of Management. B.S., M.B.A., University of Southern Mississippi; Ph.D., University of Alabama.

MOORMAN, CHARLES WICKLIFFE, Dean of the University and Professor of English. A.B., Kenyon College; M.A., Ph.D., Tulane University; Guggenheim Fellow.

MOORMAN, RUTH GLINDMEYER, Assistant Professor of Foreign Languages. A.B., Agnes Scott College; M.A., University of Cincinnati; doctoral study, Louisiana State University.

MORELAND, WILBUR LAFE, Assistant Professor of Music Education. B.A., M.A., University of Northern Colorado.

MORGAN, JEROLD JOSEPH, Chairman of Department of Accounting and Professor of Accounting. B.S., University of Southern Mississippi; M.B.A., University of Houston; Ph.D., University of Alabama.

MORRELL, JOSEPH S., Associate Professor of Mathematics. B.S., University of Southwest Louisiana; M.S., Louisiana State University; Ph.D., Florida State University.

MOTTLEY, REED RICKMAN, Assistant Professor of Curriculum and Instruction. B.A., Catawba College; M.Ed., Ed.D., University of Georgia.

MULLINS, JOE BARRY, Professor of Music and Director of Bands. B.Mus., Southwestern at Memphis; M.M., George Peabody College; Ed.D., University of Illinois.

MUNSELL, DONALD THOMAS, Assistant Professor of Music. B.M., University of Miami; M.A., Ph.D., State University of Iowa.

MURLEY, JOHN ALBERT, Assistant Professor of Political Science. B.A., University of Dallas; M.A., Claremont Graduate School.

MUSGRAVE, RAY SIGLER, Chairman of Department of Psychology and Professor of Psychology. B.A., Bethany College; M.A., Ohio Wesleyan University; Ph.D., Syracuse University.

NAU, JOHN FREDERICK, Distinguished University Professor of Anthropology, Philosophy, and Religion. B.D., Concordia Seminary; M.A., Tulane University; Ph.D., University of South Carolina.

NEUMANN, EDITHA SCHLANSTEDT, Associate Professor of Foreign Languages. B.A., University of Berlin; M.S.W., University of Pittsburgh; Ph.D., Tulane University.

NICHOLS, CLINTON COLGATE, Assistant Professor of Music. B.M.Ed., Oklahoma Baptist University; M.M., New Orleans Baptist Theological Seminary; D.M., Florida State University.

NISSAN, EDWARD, Associate Professor of Computer Science and Statistics. B.S., M.A., University of Kansas; Ph.D., Texas A & M University.

NOBLE, ELEANOR FLINT, Associate Professor of Curriculum and Instruction. B.A., M.A., Ph.D., Arizona State University.

NORRIS, DONALD EARL, JR., Assistant Professor of Biology. B.S., Indiana State University; M.S., Ph.D., Tulane University.

NORSWORTHY, JOHN McCALL, Associate Professor of Special Education. B.S., M.Ed., Mississippi State University; Ed.D., University of Southern Mississippi.

NOWAKOWSKI, MARIAN ZYGMUNT, Assistant Professor of Music. Performance Diploma, Conservatory of Music and Fine Arts, Lwon, Poland.

O'HARE, FRANK, Associate Professor of English. M.A., University of Glasgow, Scotland; M.Ed., Florida Atlantic University; Ph.D., Florida State University.

OLSEN, BOB GILLHAM, Assistant Professor of Research and Human Development. B.A., M.A., University of North Carolina; Ed.D., North Carolina State University.

ORANGE, LINWOOD ELDEN, Professor of English. A.B., M.A., Ph.D., Duke University.

OVERSTREET, ROBIN M., Assistant Professor of Biology, Gulf Coast Research Laboratory. B.S., University of Oregon; M.S., Ph.D., University of Miami.

OWEN, DAVID McINTOSH, Associate Professor of Medical Technology. B.S., M.D., University of Mississippi School of Medicine.

OWEN, DONALD ROBERTSON, Assistant Professor of Polymer Science. B.S., The Citadel; M.S., University of Southern Connecticut; Ph.D., University of Houston.

OXFORD, EDWIN PAUL, Assistant Professor of Mathematics. B.S., M.S., Louisiana Polytechnic Institute; Ph.D., New Mexico State University.

OAZERDEN, HALIL, Assistant Professor of Psychology, Gulf Park. B.A., Huntingdon College; M.A., Ph.D., University of Southern Mississippi.

PANKO, THOMAS RALPH, Assistant Professor of Sociology. B.A., M.A., Ph.D., Louisiana State University.

PARISH, GERALDINE, Assistant Professor of Social Work. B.A., William Carey College; M.S.W., Tulane University.

PAULSON, OSCAR LAWRENCE, JR., Acting Chairman of Department of Geology and Associate Professor of Geology. B.S., M.S., Mississippi State University; Ph.D., Louisiana State University.

PEARSON, ROGER, Chairman of Department of Anthropology, Philosophy, and Religion and Professor of Anthropology, Philosophy, and Religion. B.Sc., M.Sc., Ph.D., University of London.

PEDDICORD, HERSHCEL QUINTON, JR., Associate Professor of Research and Human Development. B.A., Presbyterian College; M.Ed., University of South Carolina; Ed.D., Duke University.

PEDDICORD, PAUL WALLACE, Chairman of Department of Curriculum and Instruction and Professor of Curriculum and Instruction. B.A., Furman University; M.Ed., University of Houston; Ed.D., Duke University.

PESSONEY, GEORGE FRANCIS, III, Research Coordinator of College of Science and Technology and Associate Professor of Biology. B.S., M.A., Sam Houston State College; Ph.D., University of Texas.

PHILLIPS, OLIVER OTTO, Associate Professor of Research and Human Development. B.S., M.A., Ed.D., University of Southern Mississippi.

PINSON, JAMES WESLEY, Associate Professor of Chemistry. B.S., William Carey College; M.S., Ph.D., University of Mississippi.

PLUE, WILLIAM VILAS, Chairman of Department of Special Education and Professor of Special Education. B.S., M.Ed., Lewis and Clark College; Ed.D., University of Oregon.

POIRIER, WILLIAM HARVEY, Chairman of Department of Art Education and Associate Professor of Art Education. B.S., Eastern Michigan University; M.A., Ed.S., George Peabody College; Ed.D., University of Southern Mississippi.

POSEY, LLOYD FRANKLIN, Associate Professor of Curriculum and Instruction. B.S., University of Alabama; M.A., Ed.D., George Peabody College.

POUND, GOMER JEFFREY, Dean of Division of Extension and Public Service and Professor of Music Education. Mus.B., Michigan State University; M.Mus.Ed., Ph.D., in M.Ed., Florida State University.

PRENSHAW, ERIC RICHARD, Assistant Dean of School of Fine Arts and Associate Professor of Music Education. B.M., M.M., Northwestern University; D.M.A., University of Texas.

PRENSHAW, PEGGY WHITMAN, Associate Professor of English. B.A., M.A., Mississippi College; Ph.D., University of Texas.

PRESSER, WILLIAM HENRY, Associate Professor of Music. A.B., Alma College; Mus.M., University of Michigan; Ph.D., University of Rochester.

PROBST, CHARLES H., Counselor and Assistant Professor of Guidance. B.S., M.A., University of Southern Mississippi; Ed.D., University of Mississippi.

PUCKETT, THOMAS FRANKLIN, Professor of Medical Technology. B.A., University of California; M.S., University of Colorado; M.D., University of California.

PYE, WALLACE CLARK, Assistant Professor of Mathematics. B.S., M.S., Louisiana State University; Ph.D., Texas Technological University.

QUARNSTROM, ISAAC BLAINE, Chairman of Department of Theatre Arts and Associate Professor of Theatre Arts. B.S., M.A., Brigham Young University; Ph.D., Ohio State University.

QUIGLEY, PATRICK ANDREW, JR., Assistant Professor of Psychology. B.A., Brooklyn College; M.Ed., University of Florida.

RAGSDALE, DANA OUGH, Assistant Professor of Music. B.M., University of Denver; M.M., University of Hartford.

RAINS, OHREN WILLIS, Assistant Professor of Curriculum and Instruction. B.S., Arkansas Agricultural and Mechanical College; M.Ed., Alabama Polytechnic Institute; Ed.D., Oklahoma State University.

RANDOLPH, DANIEL LEE, Associate Professor of Guidance. B.S., University of West Virginia; M.Ed., Marquette University; Ph.D., Florida State University.

RATCLIFF, RUTH ANN TAYLOR, Associate Professor of Mathematics. B.S., Mississippi State University; M.A., Ph.D., University of Alabama.

RAYBORN, GRAYSON HANKS, Assistant Professor of Physics. B.S., Rensselaer; Ph.D., University of Florida.

RHODES, ROBERT CLYDE, Chairman of Department of Speech and Hearing Sciences and Professor of Speech and Hearing Sciences. B.S., Colorado State University; M.A., University of Colorado; Ph.D., University of Pittsburgh.

RICHARDSON, THOMAS JOSEPH, Assistant Professor of English. B.A., University of Southern Mississippi; M.A., University of Alabama.

RICHMOND, MARK GLENN, Assistant Professor of Curriculum and Instruction. B.S., M.S., University of Mississippi; Ed.D., Indiana University.

ROBERTS, WILLIAM MARVIN, JR., Chairman of Department of Geography and Professor of Geography. B.A., M.A., University of Iowa; Ph.D., University of Washington.

ROGERS, KEN EDWARD, Assistant Professor of Biology. B.S., Tennessee Polytechnic Institute; M.S., Auburn University; Ph.D., University of Tennessee.

ROGERS, LOUIS LEROY, Director of Office of Student Teaching and Professor of Research and Human Development. B.S., M.A., University of Southern Mississippi; Ed.D., University of Tennessee.

ROSSO, SAMUEL WILFORD, Assistant Professor of Biology. B.A., University of Southern Mississippi; M.S., Louisiana State University; Ph.D., Washington University, St. Louis.

RUSH, GARY SHERRIEL, Assistant Professor of Research and Human Development. B.A., Louisiana College; M.Ed., Ph.D., Louisiana State University.

RYAN, MARGARET WILSON, Assistant Professor of Art Education. B.A., M.Ed., Florida Atlantic University; Ed.D., University of Florida.

SANCHEZ, RICHARD XAVIER, Assistant Professor of Music. B.A., Tulane University; M.M., doctoral study, Louisiana State University.

SANFORD, AUBREY CECIL, Associate Professor of Management. B.S. in B.A., M.B.A., University of Southern Mississippi; Ph.D., Louisiana State University.

SCARBOROUGH, WILLIAM KAUFFMAN, Associate Professor of History. A.B., University of North Carolina; M.A., Cornell University; Ph.D., University of North Carolina.

SCHAUB, MARY TURPEN, Instructor of Speech and Hearing Science. B.A., M.S., University of Wyoming.

SCHEETZ, RAYMOND WAYNE, Assistant Professor of Biology. B.S., Philadelphia College of Pharmacy and Science; M.S., Ph.D., University of Delaware.

SCHMIDT, WILLIAM THEODORE, Dean of the School of Health, Physical Education, and Recreation and Assistant Professor of Recreation. B.A., M.A., Ph.D., University of Southern Mississippi.

SCHOELL, WILLIAM FREDERICK, III, Associate Professor of Marketing. B.S., Louisiana State University, New Orleans; M.B.A., Ph.D., University of Arkansas.

SHAFER, BILL WAYNE, Director of Student Counseling and Associate Professor of Guidance. B.S., M.Ed., Ph.D., East Texas State University.

SHAFFER, JOHN RICHARD, Professor of Research and Human Development. B.S., Memphis State University; M.A., Teachers College, Columbia University; Ed.D., Indiana University.

SHARP, BETTY SUE HUMPHRIES, Acting Chairman of Department of Environmental Design and Assistant Professor of Environmental Design. B.S., M.S., University of Southern Mississippi.

SHERRY, VINCENT JEROME, JR., Assistant Professor of Political Science and Administrative Assistant, Gulf Park Relations. A.B., Western Kentucky University; LL.B., George Washington University; M.A., Middle Tennessee State College.

SHOEMAKER, DONALD JOSEPH, Assistant Professor of Sociology. B.A., Millsaps College; M.A., Ph.D., University of Georgia.

SIRMON, WILLIAM ARNOLD, Chairman of Department of Finance and General Business and Professor of Finance. B.S., M.S., University of Southern Mississippi; D.B.A., Mississippi State University.

SISEMORE, DAVID ALLEN, Associate Professor of Psychology. B.A., M.A., Ph.D., University of Arkansas.

SITZMAN, MICHAEL JAY, Counselor in Student Counseling and Assistant Professor of Guidance. B.S., Pennsylvania State University; M.Ed., Ph.D., University of Florida.

SKATES, CRAIG BARNWELL, Instructor of English. B.A., Millsaps College; M.A., University of Southern Mississippi.

SKATES, JOHN RAY, JR., Chairman of Department of History and Professor of History. B.B.A., University of Mississippi; M.A., Ph.D., Mississippi State University.

SLATER, THOMAS BERNARD, Assistant Professor of Art Education. B.F.A., University of Oklahoma; M.Ed., Ed.D., University of Houston.

SLAY, BILLY BORDEN, Professor of Physical Education. B.S., M.S., University of Southern Mississippi; Ed.D., Louisiana State University.

SMITH, BROOKS EUGENE, Associate Professor of Business Administration, Gulf Park. B.S., M.B.A., University of Southern Mississippi; Ed.D., Louisiana State University.

SMITH, BYRON COLEMAN, Professor of Biology. B.S., Indiana State University; M.A., DePauw University; Ph.D., University of Georgia.

SMITH, JACK ALAN, Administrative Assistant to Dean of University and Professor of English. B.S., Troy State College; M.A., Ph.D., Auburn University.

SMITH, JOHN LARRY, Associate Professor of Medical Technology. B.S., University of Oklahoma; M.D., Tulane University School of Medicine.

SONNIER, ISADORE LEON, Associate Professor of Science Education. A.B., University of Southwestern Louisiana; A.M., Louisiana State University; Ed.D., Colorado State College.

SOUTH, DONALD RAY, Chairman of Department of Sociology and Professor of Sociology. B.S., University of Southern Mississippi; M.S., Ph.D., Louisiana State University.

STAMPER, DONALD REXFORD, Assistant Professor of English. B.A., Morehead State University; M.A., Ph.D., University of Arkansas.

STEGENGA, MARTIN, Chairman of Department of Management and Professor of Management. B.S., M.S., Mississippi State University; D.B.A., Indiana University.

STEVENS, ROBERT ELLIS, Associate Professor of Marketing. B.S., Arkansas State College; M.B.A., Ph.D., University of Arkansas.

STEWART, DAVID KEITH, Professor of Educational Administration and Supervision. B.A., Central Missouri University; M.A., Columbia University; Ed.D., New York University.

STEWART, DELIA WEDDINGTON, Instructor in Theatre Arts. B.A., University of Southern Mississippi; M.A., Louisiana State University, New Orleans.

STITH, JAMES LOGAN, Associate Professor of Medical Technology. A.B., M.D., George Washington University.

STOCKER, LEONARD DON, Associate Professor of Music. A.B., University of Michigan; M.A., Columbia University; Ph.D., Florida State University.

STOCKS, PETER KONRAD, Chairman of Department of Microbiology and Professor of Microbiology. B.S., Millsaps College; M.S., University of Southern Mississippi; Ph.D., Louisiana State University.

STRINGER, GARY ALLEN, Assistant Professor of English. B.A., M.A., Ph.D., University of Oklahoma.

SULLIVAN, WARREN CLAYTON, Associate Professor of Anthropology, Philosophy, and Religion. B.A., Mississippi College; B.D., Th.D., Southern Baptist Theological Seminary.

SUNDEEN, DANIEL ALVIN, Assistant Professor of Geology. B.A., University of New Hampshire; A.M., Ph.D., Indiana University.

SWAN, DONALD ARTHUR, Assistant Professor of Anthropology, Philosophy, and Religion. B.A., Queens College (New York); M.A., Hunter College (New York); M.A., New York University.

SWEAT, C DOWNING, JR., Assistant Professor of Management. B.M.E., Auburn University; M.S., Florida State University; doctoral study, University of Alabama.

SWITZER, JAMES REGINALD, Professor of Health. B.S., University of Southern Mississippi; M.S., Louisiana State University; Ed.D., University of Texas.

TALLEY, JANET LOUISE, Assistant Professor of Physical Education. B.S., Centenary College of Louisiana; M.Ed., Northwestern Louisiana State University.

TATALOVICH, RAYMOND, Assistant Professor of Political Science. B.A., Ohio University; M.A., Ph.D., University of Chicago.

TAYLOR, GLORIA BRUEMMER, Assistant Professor of Business Education. B.S., M.S., Ed.D., University of Southern Mississippi.

THAMES, SHELBY FRELAND, Dean of College of Science and Technology and Professor of Polymer Science. B.S., M.S., University of Southern Mississippi; Ph.D., University of Tennessee.

THARPE, JAC LYNDON, Professor of English. B.A., M.A., University of Tennessee; Ph.D., Harvard University.

THOMAS, JAMES ANDREW, Associate Professor of Anthropology, Philosophy, and Religion. B.A., Long Beach State College; M.A., Ph.D., University of Southern California.

THOMAS, ROBERT CHARLES, Assistant Professor of Speech and Hearing Sciences. B.A., Texas Christian University; M.A., Ph.D., University of Southern Mississippi.

THOMPSON, CHARLES EDWIN, Assistant Professor of Education, Gulf Park. A.B., Allegheny College; M.Ed., Ed.D., University of Southern Mississippi.

THOMPSON, JOHN RICHARD, Associate Professor of Biology. B.A., Albion College; M.A., Ph.D., Duke University.

THORNTON, RONALD WAYNE, Assistant Professor of Foreign Languages. A.B., Louisiana State University; A.M., Indiana University.

THRASH, JOE BARHAM, Jr., Assistant Professor of Mathematics. B.S., M.S., Lamar State College; Ph.D., Texas Technological College.

TOOM, PAUL MARVIN, Associate Professor of Chemistry. B.A., Central College, Iowa; Ph.D., Colorado State University.

TORRES, PAUL DELMAS, Associate Professor of Accounting. B.S.C., Spring Hill College; M.B.A., Ph.D., University of Alabama.

TOWNLEY, JAMES AIRD, Assistant Professor of Physical Education. B.S., M.A., University of Southern Mississippi; doctoral study, Louisiana State University.

TRABONT, JACK LEONARD, Associate Professor of Special Education. B.S., M.S., Ph.D., University of Oregon.

TRACY, WARREN FRANCIS, Librarian and Professor of Library Science. A.B., Earlham College; B.S., in L.S., Western Reserve University; M.A., Ph.D., University of Chicago.

TRAYLOR, CHARLES TIM, Assistant Professor of Geography and Technical Cartographer. B.S., M.S., University of Alabama.

TUCHAK, WILLIAM, Professor of Political Science. LL.M., Casimer University; I.A.M., Columbia University; Ph.D., University of Colorado.

TUCKER, FORREST DALE, Professor of Communication. B.A., University of Wichita; M.A., Ph.D., Cornell University.

TUCKER, SAMUEL, Associate Professor of Social Work. B.A., Goshen College; M.S.W., Wayne State University.

TULEY, ROBERT JOSEPH, Associate Professor of Music Education and Coordinator of Elementary Music Education. B.M.Ed., M.A.Ed., Murray State University; Ed.D., University of Illinois.

TURNAGE, NEILL EDWARD, Assistant Professor of Management. B.S., Mississippi State University; M.A., University of Alabama.

[3] UPHAM, SIDNEY D., Professor of Chemistry and Director of the Universities Marine Center. A.B., Clark University; Ph.D., Oklahoma State University.

van ALLER, ROBERT THOMAS, Dean of the Graduate School and Professor of Chemistry. B.S., M.S., Ph.D., University of Alabama.

VREELAND, RICHARD CRAWFORD, Chairman of Department of Marketing and Professor of Marketing. B.A., Rollins College; M.B.A., Ph.D., University of Florida.

WALDOFF, STANLEY, Assistant Professor of Music. B.S., M.S., Juilliard School of Music; Ed.D., Columbia University.

WALES, ROBERT WARE, Assistant Professor of Geography. B.S., M.S., Oregon State University; Ph.D., University of Kansas.

WALKER, JAMES FREDERICK, Distinguished University Professor of Biology. A.B., M.S., University of Mississippi; Ph.D., University of Iowa.

WARD, HARRY CALVIN, JR., Assistant Professor of Art. B.A., University of Southern Mississippi; M.A., East Tennessee State University.

WEATHERFORD, SIDNEY EDWARD LEE, JR., Director of Bureau of Institutional Research and Professor of Educational Administration and Supervision. B.S., M.A., University of Southern Mississippi; Ed.D., University of Florida.

WEAVER, GORDON ALLISON, Associate Professor of English. B.A., University of Wisconsin; M.A., University of Illinois; Ph.D., University of Denver.

WEBB, CHARLES FIRMIN, Director of Driver Training Program and Assistant Professor of Health. B.S., M.A., University of Southern Mississippi; doctoral study, University of Georgia.

WEBSTER, PORTER GRIGSBY, Professor of Mathematics. B.A., Georgetown College; M.S., Ph.D., Auburn University.

WELKER, LATNEY CONRAD, JR., Chairman of Department of Research and Human Development and Professor of Research and Human Development. B.S., Millsaps College; M.A., Ed.D., University of Southern Mississippi.

WERTZ, DAVID LEE, Professor of Chemistry. B.S., Arkansas State University; M.S., Ph.D., University of Arkansas.

WEST, BEN MARSHALL, Associate Professor of Finance and Staff Counselor. B.S., United States Military Academy; M.S., University of Colorado; J.D., University of Mississippi.

WHITBECK, GEORGE WALTER, Chairman of the Department of Library Science and Professor of Library Science. A.B., Columbia College; M.S., Columbia School of Library Science; M.A., Columbia University; Ph.D., Rutgers University.

WHITESELL, FRANK COOK, Associate Professor of Economics. B.A., M.A., University of South Carolina; Ph.D., Tulane University.

WIGGINS, ROBERT GENE, Assistant Professor of Communication. B.S., M.S., University of Southern Mississippi.

WILBER, LEON AUSTIN, Distinguished University Professor of Political Science. A.B., M.A., Ph.D., University of Michigan.

WILDMAN, GARY CECIL, Chairman of Department of Polymer Science and Associate Professor of Polymer Science. A.B., Thiel College; Ph.D., Duke University.

WILLIAMS, D.C., JR., Director of Bureau of Business Research and Associate Professor of Economics. B.S., Southeastern Louisiana College; M.S., Ph.D., Louisiana State University.

WILLIAMS, HOWARD PERSON, Associate Professor of Chemistry. A.B., East Carolina University; M.S., Ph.D., University of Florida.

WIMBERLY, JACK COOK, Chairman of Department of Economics and Professor of Economics. B.A., Louisiana Polytechnic Institute; M.A., Ph.D., Louisiana State University.

WINGER, ROGER KOHLER, Associate Professor of Speech and Hearing Sciences. B.S., Ashland College; M.A., Ph.D., Ohio State University.

WOOD, FORREST EDWARDS, JR., Associate Professor of Anthropology, Philosophy, and Religion. B.A., Baylor University; Th.D., Southwestern Baptist Theological Seminary.

WOOD, JOHN HERBERT, Assistant Professor of Physics and Astronomy. B.S., M.S., Ph.D., Virginia Polytechnic Institute.

WOOD, VIVIAN POATES, Assistant Professor of Music. B.Mus., Harte College of Music; M.Mus., Ph.D., Washington University.

WOODMANSEE, ROBERT A., Associate Professor (Head, Ecology Section, Gulf Coast Research Laboratory). B.S., M.S., University of Miami; Ph.D., Western Reserve University.

YARBROUGH, KAREN MARGUERITE, Associate Professor of Microbiology. B.S., M.S., Mississippi State University; Ph.D., North Carolina State University.

YARNELL, THOMAS DONALD, Assistant Professor of Psychology. B.A., Fairleigh Dickinson University; M.A., Ph.D., Louisiana State University.

YARROW, WALTER HARRY, Professor of Health. B.S., M.A., Ed.D., University of Southern Mississippi.

YESTADT, JAMES FRANCIS, Assistant Professor of Music and Coordinator of Allied Arts. B.S., Lebanon Valley College; M.A., Columbia University.

ZANINELLI, LUIGI JOHN, Associate Professor of Music. DIP., Curtis Institute of Music.

---

1. Leave of Absence, Fall Quarter, 1973.
2. Effective, January 1, 1974.
3. Resigned, October 31, 1973.
4. Resigned, November 30, 1973.

INDEX

A

Academic Requirements 32-40
Accreditation .... Inside Front Cover
Accounting 42-44, 127
Administrative Officers 11
Admission Procedures 24
Admission Requirements 20
Admission Test for Graduate Study in Business 20, 42
Adult Education 75, 79, 128
Advanced Graduate Study 23
Aliens 27, 29
Allied Arts 128
Anthropology, Philosophy, and Religion 98, 128
Applied Music 129
Art 131
Art Education 87, 131

B

Biology 112, 132
Board of Trustees 10
Bureau of Business Research 42
Business Administration, School of 42
Business Education 48, 137
Business, Graduate Study Test 20, 42

C

Calendar 5
Change of Schedule 29
Chemistry 113, 138
Child Development 95, 142
Clothing and Textiles 143
Communication 99, 144
Comparative Literature 101, 144
Computer Science and Statistics 114, 145
Conditional Graduate Student 21, 23, 145
Counseling and Guidance 52, 145
Course Descriptions 127
Course Load 25, 33
Course Numbers 32
Credit, Hours 33
Credit, Transfer 22
Criminal Justice Studies 97, 147
Curriculum and Instruction 58

D

Degree Fee 29
Degrees Offered 16-18
Dissertations 39
Doctoral Degrees, General Requirements 23, 37
Doctoral Documents 39, 40
Driver Education 93, 167

E

Early Childhood Education 58
Economics 42-44, 147
Education and Psychology, College of 46
Educational Administration 149
Educational Administration and Supervision 67
Educational Foundations 75, 151
Educational Media 75
Educational Psychology 152
Educational Research 75, 78, 154
Elementary Education 59, 155
English 100, 158
Environmental Design 95
Environmental Science 111, 160
Equal Educational Policy ..... See Inside Front Cover
Examinations 35, 37, 38
Expenses 24-29
Extension Credit 22

F

Faculty 212
Faculty, Limitations on 23

Family Life Services 95
Fees 24-29
Fellowships 29
Fields of Instruction 126
Finance 43, 160
Financial Help for
Graduate Students 29, 42
Financial Information 24-29
Fine Arts, School of 85
Food and Nutrition 96, 161
Food Science and
Technology 111, 161
Foreign Language
Requirements 39
Foreign Languages 100, 162
Foreign Students 27, 29
French 100, 162
Full-Time Student 21, 33

G

Genetics 118, 163
Geography 102, 164
Geology 114, 166
German 100, 162
Grading System 32
Graduate Council 13, 15, 20
Graduate Degrees 16-18
Graduate Record
Examinations .....20-23, (see also each department)
Graduate School 15
Graduation Exercises ...See Calendar
Guidance 52, 145
Gulf Coast Research
Laboratory 136
Gulf Park 15, 42, 43

H

Health 92, 167
Health, Physical Education,
and Recreation, School of 92
Health Services 24
History 103, 169
Home Economics, School of 95
Home Economics Education 96
Housing and Home Management ..172

I

Incidental Fee 24-25, 33
Index 235
Industrial and Vocational
Education 71, 172
Industrial Arts 71
Institute Credit 34
Institute of Genetics 118

J

Journalism 173

L

Language Requirements 39
Late Registration 29
Latin American Studies
Program 97
Liberal Arts, College of 97
Library Science 72, 173
Limitations on Faculty 23
Loans 29

M

Management 43, 175
Marketing 43, 176
Marriage and Family Life 176
Master of Philosophy 23, 36
Master's Degrees, General
Requirements 20, 33
Mathematics 115, 177
Medical Technology 116, 179
Membership .....See Inside Front Cover
Memorandum of Credits 29
Microbiology 117, 179
Military Personnel 27
Miller Analogies Test 38
Minor 34, 38
Music 87, 181
Music Education 89, 91, 184
Music Fees 28

N

Natchez 15, 43

Non-Degree Credit 22
Non-Degree Student 21, 23
Non-Resident Fee 28
Non-Resident Status 26-27

O

Oral Examinations ..... See Departments

P

Part-Time Student 21, 33
Philosophy 186
Physical Education 93, 186
Physics 119, 188
Placement Bureau 30
Political Science 107, 190
Polymer Science 119, 192
Psychology 73, 193
Psychology, Educational 152
Public Address 196

Q

Qualifying Entrance Examinations .... See Departments

R

Radio-Television-Film 196
Reading 60, 63
Recreation 196
Refund Policy 94, 27
Registration .....See Calendar
Registration, Late 29
Religion 197
Research and Human Development 75
Research Training 75
Residency 38
Resident Center Credit 22
Room and Board 25

S

Science 198
Science and Technology, College of 81, 111
Science Education 81, 119, 198
Secondary Education 61, 66, 199
Seniors 24
Social Work, School of 122, 201
Sociology 108, 203
Spanish 100, 162
Special Education 83, 204
Special Fees 28-29
Specialist's Degree 23, 36
Speech and Hearing Sciences .109, 207
Statistics Requirements 39

T

Tables of Expenses 24-29
Telecommunications Management 42, 45
Theatre Arts 89, 209
Thesis Requirements 34
Time Limitations 33, 37
Transcript of Credits 24

U

Undergraduate Senior 24
USM-Gulf Park 15, 42, 43
USM-Natchez 15, 43

V

Veteran's Administration 25
Vocational Education 71, 72